



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

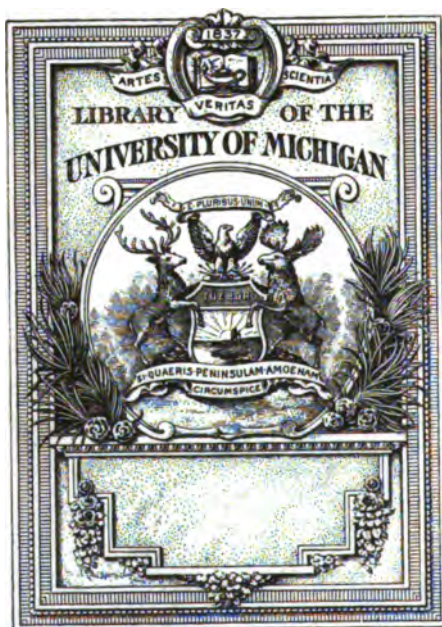
Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

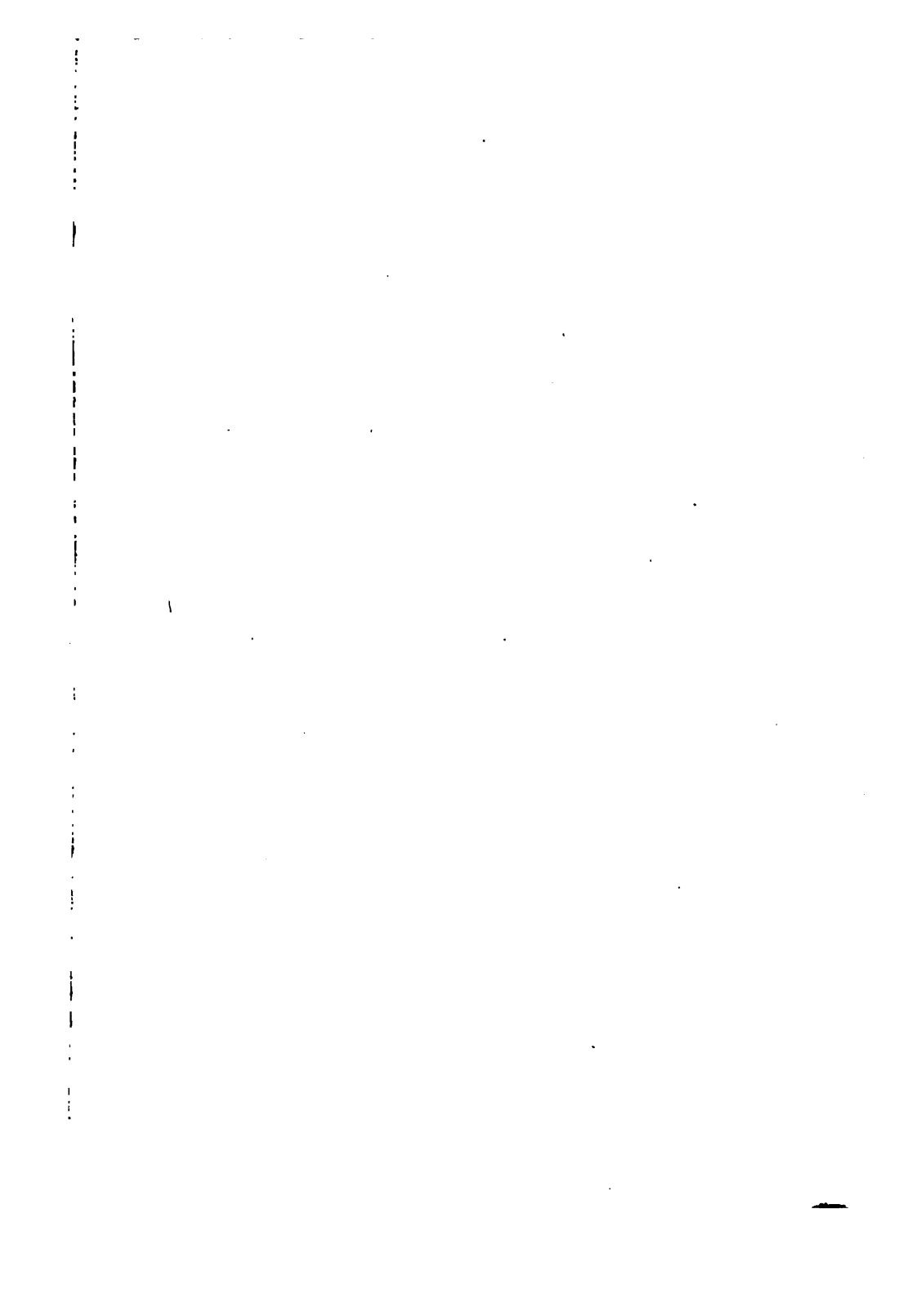
About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

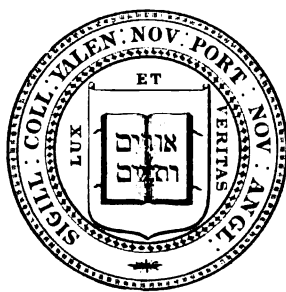


LD
6310



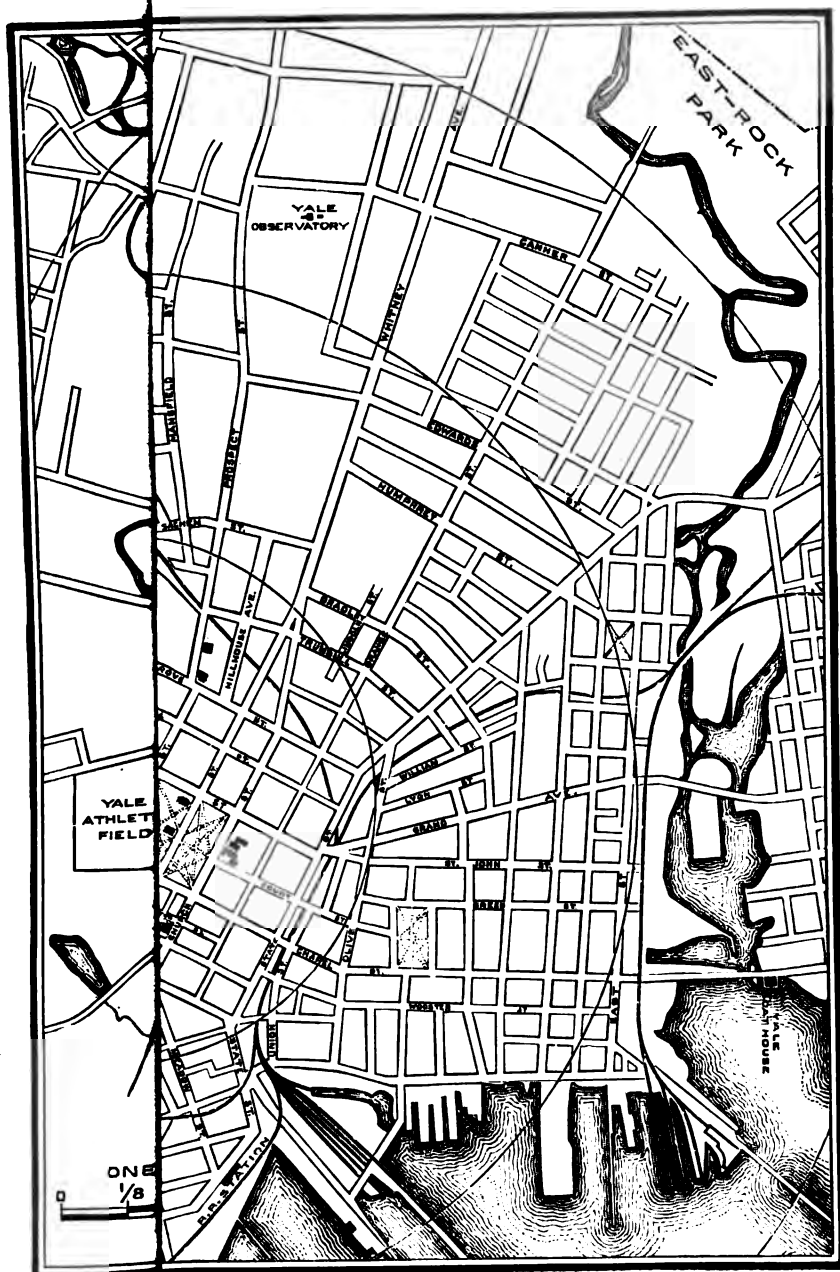


CATALOGUE
OF
YALE UNIVERSITY

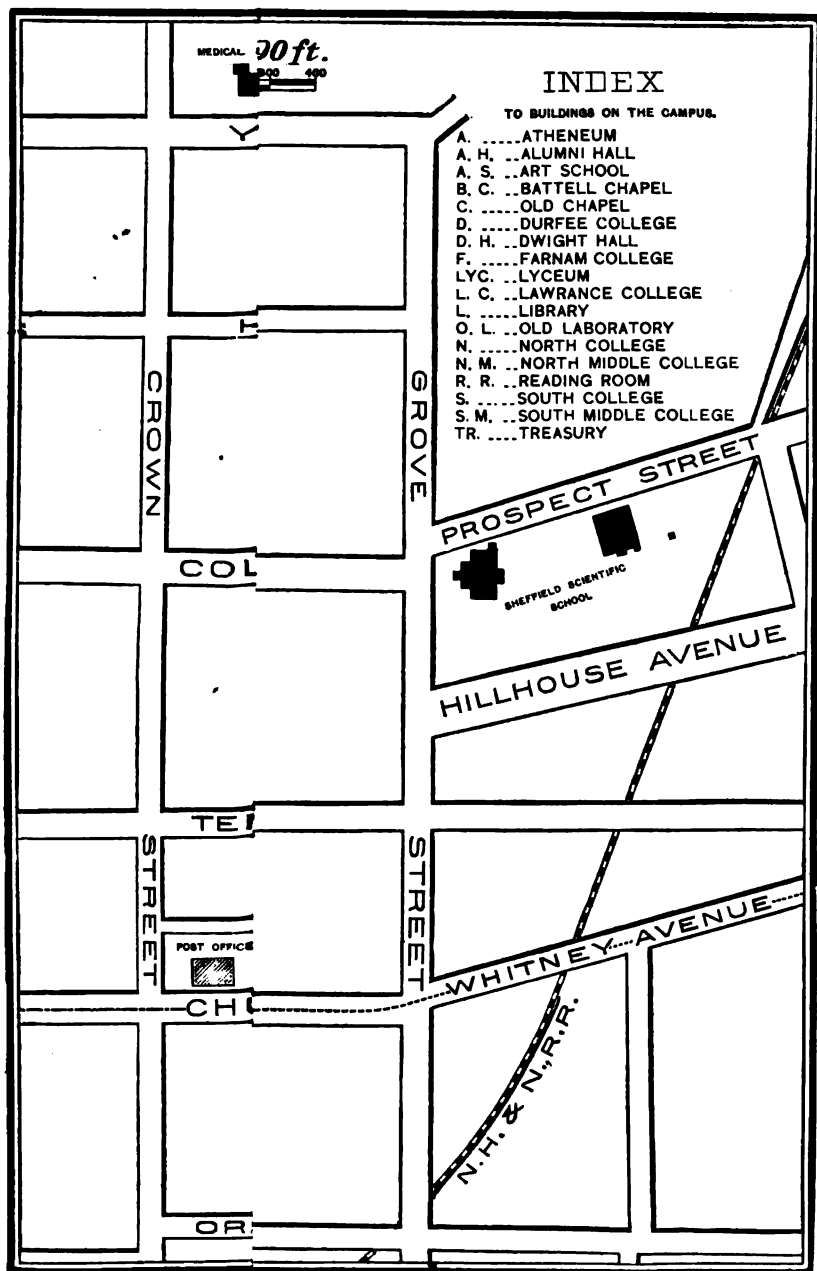


1886-87

HAVEN.



INGS.



CATALOGUE

OF

39443

YALE UNIVERSITY

CLXXXVIIth YEAR

1886-87



NEW HAVEN:

TUTTLE, MOREHOUSE & TAYLOR, PRINTERS

1886

CONTENTS

ABBREVIATIONS, OFFICE HOURS, ETC.	4
MEMBERS AND OFFICERS OF THE CORPORATION	5
CALENDAR FOR 1886-87	6
LIST OF FACULTY, INSTRUCTORS, ETC.	7-14
GOVERNMENT OF THE UNIVERSITY	15-23
LIST OF DEPARTMENTS OF INSTRUCTION	24
ACADEMICAL DEPARTMENT (YALE COLLEGE)	25-66
SHEFFIELD SCIENTIFIC SCHOOL	67-92
COURSES OF GRADUATE INSTRUCTION	93-107
SCHOOL OF THE FINE ARTS	108-113
YALE DIVINITY SCHOOL	114-124
YALE MEDICAL SCHOOL	125-136
YALE LAW SCHOOL	137-151
LIBRARIES	152-153
PEABODY MUSEUM OF NATURAL HISTORY	154-158
OBSERVATORY	159-160
UNIVERSITY PRIZE	160
LISTS OF STUDENTS	161-199
Graduate Courses	161-163
Yale College	164-177
Sheffield Scientific School	178-185
Art School	186-187
Divinity School	188-193
Medical School	194-195
Law School	196-198
LISTS OF DEGREES, APPOINTMENTS, AND PRIZES	199-210
INDEX	211-214

ABBREVIATIONS

A., Absent on leave; C., Old Chapel; D., Durfee College; E., East Divinity Hall; F., Farnam College; L., Lawrance College; LYC., Lyceum; N., North College; N. M., North Middle College; N. S. H., North Sheffield Hall; S., South College; S. H., Sheffield Hall; S. M., South Middle College; TR., Treasury Building; W., West Divinity Hall.

Upon the College Square, the rooms numbered from 1 to 32 are in South College; from 33 to 64 in South Middle College; from 65 to 96 in North Middle College; from 97 to 128 in North College; from 129 to 177 in Farnam College; from 178 to 185 in the Lyceum; from 186 to 200 in the Old Chapel; from 201 to 240 in Durfee College; from 241 to 282 in Lawrance College.

The rooms in East Divinity Hall are numbered from 1 to 54; in West Divinity Hall from 55 to 124.

The rooms in Sheffield Hall are numbered from 1 to 21; in North Sheffield Hall from 26 to 58.

OFFICE HOURS

THE PRESIDENT is in his room, No. 7 Treasury Building, from 10 A. M. to 12 M., every week-day during term-time.

THE TREASURER'S OFFICE, No. 5 Treasury Building, is open from 9 A. M. to 3 P. M., every week-day during term-time, and from 10 A. M. to 1 P. M., during vacations.

THE SECRETARY is to be found in the Library, every week-day during term-time, from 9.30 A. M. to 1 P. M.

For Catalogues and general information, address THE SECRETARY OF YALE UNIVERSITY, NEW HAVEN, CONNECTICUT.

The Catalogue is published in December of each year, and a copy will be sent without charge to any graduate requesting it.

A list of the Graduates of the University (in Latin) is published triennially,—the last edition in June, 1886; a copy will be supplied to any graduate desiring it, on receipt of the postage (eight cents); copies may be obtained by other persons at cost price, fifty cents, with postage.

CORPORATION

PRESIDENT

REV. TIMOTHY DWIGHT, D.D., LL.D.

FELLOWS

HIS EXCELLENCY HENRY B. HARRISON, LL.D., NEW HAVEN
HIS HONOR LORRIN A. COOKE, BARKHAMSTED
REV. GEORGE J. TILLOTSON, M.A., WETHERSFIELD
HON. WILLIAM M. EVARTS, LL.D., NEW YORK CITY
CHIEF JUSTICE MORRISON R. WAITE, LL.D., WASHINGTON, D.C.
REV. LAVALETTE PERRIN, D.D., TORRINGTON
REV. BURDETT HART, M.A., NEW HAVEN
REV. SAMUEL G. WILLARD, M.A., COLCHESTER
REV. JOSEPH W. BACKUS, M.A., PLAINVILLE
HON. FREDERICK J. KINGSBURY, M.A., WATERBURY
REV. NATHANIEL J. BURTON, D.D., HARTFORD
REV. JOSEPH ANDERSON, D.D., WATERBURY
REV. CHARLES RAY PALMER, M.A., BRIDGEPORT
REV. JOSEPH H. TWICHELL, M.A., HARTFORD
HON. WILLIAM WALTER PHELPS, M.A., ENGLEWOOD, N. J.
REV. JAMES W. COOPER, D.D., NEW BRITAIN
WILLIAM W. FARNAM, M.A., NEW HAVEN
THOMAS G. BENNETT, Ph.B., NEW HAVEN

SECRETARY

FRANKLIN B. DEXTER, M.A.

TREASURER

HENRY C. KINGSLEY, M.A. (5 TR.) 23 Hillhouse av.

AUDITOR

WILBUR F. DAY

CALENDAR

1886

23 Sept.	Thursday	FIRST COLLEGE TERM begins.
30 Sept.	Thursday	Fall Term, Law School, begins.
1 Oct.	Friday	School of the Fine Arts, term begins.
7 Oct.	Thursday	First Term, Medical School, begins.
23 Dec.	Thursday	FIRST TERM ends.

Winter Vacation of two weeks.

1887

6 Jan.	Thursday	SECOND COLLEGE TERM begins.
13 Jan.	Thursday	Second Term, Medical School, begins.
13 Jan.	Thursday	Winter Term, Law School, begins.
31 March	Thursday	Winter Term, Law School, ends.
31 March	Thursday	Junior Exhibition.
6 April	Wednesday	SPRING RECESS begins.
13 April	Wednesday	SPRING RECESS ends.
6 May	Friday	Berkeley Scholarship Examination.
16, 17 May	Mon., Tuesd.	Annual Examination, Divinity School.
18 May	Wednesday	Anniversary, Divinity School.
23 May	Monday	Woolsey Scholarship Examination begins.
23 May	Monday	Winthrop Prize Examination.
31 May	Tuesday	School of the Fine Arts, term ends.
24 June	Friday	DeForest Prize Speaking.
26 June	Sunday	Baccalaureate Sermon.
27 June	Monday	Presentation for Degrees.
28 June	Tuesday	Anniversary of the Society of Alumni.
28 June	Tuesday	Anniversary of the Sheffield Scientific School.
28 June	Tuesday	Anniversary of the Law School.
29 June	Wednesday	COMMENCEMENT.
30 June	Thursday,	{ Examinations for admission.
1, 2 July	Friday, and Saturday	

Summer Vacation of twelve weeks.

20, 21 Sept.	Tuesd., Wedn.	Examinations for admission.
22 Sept.	Thursday	FIRST COLLEGE TERM begins.
29 Sept.	Thursday	Fall Term, Law School, begins.
1 Oct.	Saturday	School of the Fine Arts, term begins.
6 Oct.	Thursday	First Term, Medical School, begins.
22 Dec.	Thursday	FIRST TERM ends.

FACULTY AND INSTRUCTORS

- Rev. TIMOTHY DWIGHT, D.D., LL.D.
PRESIDENT (7 TR.) 126 College st.
- Rev. NOAH PORTER, D.D., LL.D.
*Clark Professor of Moral Philosophy and
Metaphysics* (276 L.) 31 Hillhouse av.
- ELIAS LOOMIS, LL.D.
*Munson Professor of Natural Philosophy and
Astronomy* 141 Church st.
- JAMES D. DANA, PH.D., LL.D.
*Silliman Professor of Geology and
Mineralogy* (6 Peabody Museum) 24 Hillhouse av.
- Rev. GEORGE E. DAY, D.D.
*Holmes Professor of the Hebrew Language and Literature
and Biblical Theology* (5 E.) 125 College st.
- Rev. SAMUEL HARRIS, D.D., LL.D.
Dwight Professor of Systematic Theology (1 E.) 144 College st.
- Rev. CHESTER S. LYMAN, M.A.
Sheffield Professor of Astronomy (39 N. S. H.) 88 Trumbull st.
- Rev. JAMES M. HOPPIN, D.D.
Professor of the History of Art (3 Art School) 47 Hillhouse av.
- Hon. EDWARD J. PHELPS, LL.D.
Kent Professor of Law
- WILLIAM D. WHITNEY, PH.D., LL.D.
*Professor of Sanskrit and Comparative Philology, and
Instructor in Modern Languages* (205 D.) 227 Church st.
- MOSES C. WHITE, M.D.
Professor of Pathology 48 College st.
- Hon. FRANCIS WAYLAND, LL.D.
Professor of the Law of Evidence (17 Court House) 91 Whitney av.
- Rev. GEORGE P. FISHER, D.D., LL.D.
*Titus Street Professor of Ecclesiastical
History* (9 E.) 27 Hillhouse av.
- CHARLES A. LINDSLEY, M.D.
Professor of the Theory and Practice of Medicine 15 Elm st.
- HUBERT A. NEWTON, LL.D.
Professor of Mathematics 135 Elm st.

- GEORGE J. BRUSH, LL.D.
*Professor of Mineralogy, and Director of the
 Sheffield Scientific School* (3 S. H.) 14 Trumbull st.
- SAMUEL W. JOHNSON, M.A.
Professor of Theoretical and Agricultural Chemistry 54 Trumbull st.
- WILLIAM H. BREWER, PH.D.
Norton Professor of Agriculture (4 S. H.) 246 Orange st.
- LEONARD J. SANFORD, M.D.
Professor of Anatomy 216 Crown st.
- HON. WILLIAM C. ROBINSON, LL.D.
*Professor of Elementary and Criminal Law and the
 Law of Real Property* (12 White's B'd'g) 137 Edwards st.
- JOHN F. WEIR, N.A., M.A.
*William Leffingwell Professor of Painting
 and Design* (9 Art School) 58 Trumbull st.
- JOHN E. CLARK, M.A.
Professor of Mathematics (40 N. S. H.) 30 Trumbull st.
-
- Professor of Rhetoric and English Literature*
- DANIEL C. EATON, M.A.
Professor of Botany (41 N. S. H.) 70 Sachem st.
- ARTHUR M. WHEELER, B.A.
Durfee Professor of History (207 D.) 86 Trumbull st.
- ROBERT BROWN, M.A.
Secretary of the Observatory Observatory pl.
- Rev. LEWIS O. BRASTOW, D.D.
Professor of Homiletics and the Pastoral Charge (3 E.) 128 Wall st.
- ADDISON VANNAME, M.A.
Librarian (LIBRARY) 121 High st.
- J. WILLARD GIBBS, PH.D.
Professor of Mathematical Physics 121 High st.
- CHARLES B. RICHARDS, M.A.
*Higgin Professor of Mechanical and Dynamical
 Engineering* (45 N. S. H.) 313 York st.
- ARTHUR W. WRIGHT, PH.D.
*Professor of Molecular Physics and
 Chemistry* (Sloane Laboratory) 73 York sq.
- THOMAS R. LOUNSBURY, B.A.
*Professor of English, and Librarian of the
 Sheffield Scientific School* 22 Lincoln st.

Rev. WILLIAM M. BARBOUR, D.D.

*Chittenden Professor of Divinity, and
College Pastor*

(117 N.) 231 York st.

• OTHNIEL C. MARSH, PH.D., LL.D.

*Professor of Palæontology, and Curator of the
Geological Collection*

(8 Peabody Mus.) 360 Prospect st.

EUGENE L. RICHARDS, B.A.

Assistant Professor of Mathematics

(86 N. M.) 315 York st.

WILLIAM I. KNAPP, PH.D.

Street Professor of Modern Languages

75 Whitney av.

JOHN H. NIEMEYER, M.A.

Street Professor of Drawing

8 Art School

FRANKLIN B. DEXTER, M.A.

*Larned Professor of American History, and
Assistant Librarian*

(LIBRARY) 178 Prospect st.

SIMEON E. BALDWIN, M.A.

*Professor of Constitutional and Mercantile Law,
Corporations, and Wills*

(25 White's B'd'g) 44 Wall st.

OSCAR D. ALLEN, PH.D.

Professor of Analytical Chemistry and Metallurgy

Tremont House

TRACY PECK, M.A.

Professor of the Latin Language and Literature

87 Wall st.

• WILLIAM H. CARMALT, M.D.

Professor of the Principles and Practice of Surgery

87 Elm st.

ADDISON E. VERRILL, M.A.

*Professor of Zoology, and Curator of the Zoological
Collection*

(15 Peabody Mus.) 86 Whalley av.

WILLIAM G. SUMNER, LL.D.

*Pelotiah Perit Professor of Political and
Social Science*

(118 N.) 140 Edwards st.

Rev. GEORGE T. LADD, D.D.

Professor of Mental and Moral Philosophy

(275 L.) 324 York st.

JOHNSON T. PLATT, M.A.

*Professor of General Jurisprudence, Torts,
and Equity*

(95 Orange st.) Tontine Hotel

SIDNEY I. SMITH, PH.B.

*Professor of Comparative
Anatomy*

(14 Peabody Museum) 78 Whalley av.

WILLIAM G. MIXTER, PH.B.

Professor of Chemistry

(8 S. H.) 144 Edwards st.

- HENRY P. WRIGHT, PH.D.
*Dunham Professor of the Latin Language
 and Literature* (89 N. M.) 128 York st.
- JAMES K. THACHER, M.D.
Professor of Physiology 206 Crown st. *
- HENRY A. BEERS, B.A.
Professor of English Literature (171 F.) 25 Vernon st.
- A. JAY DUBOIS, PH.D.
Professor of Civil Engineering (34 N. S. H.) 258 Bradley st.
- EDWARD S. DANA, PH.D.
*Assistant Professor of Natural Philosophy, and
 Curator of the Mineralogical Collection*
 (4 Peabody Museum) 111 Grove st.
- THOMAS D. SEYMOUR, M.A.
*Hillhouse Professor of the Greek Language
 and Literature* (122 N.) 112 College st.
- CHARLES S. HASTINGS, PH.D.
Professor of Physics (39 N. S. H.) 191 Bradley st.
- WILLIAM R. HARPER, PH.D.
Professor of the Semitic Languages (3 L.) 135 College st.
- FRANK E. BECKWITH, M.D.
Professor of Clinical Gynecology 139 Church st.
- WILLIAM K. TOWNSEND, D.C.L.
Professor of Contracts and Pleading (153 Church st.) 148 Grove st.
- JAMES CAMPBELL, M.D.
*Professor of Obstetrics and the Diseases of Women
 and Children* Hartford
- THEODORE S. WOOLSEY, LL.B.
Professor of International Law 250 Church st.
- LEONARD WALDO, S.D.
*Astronomer in charge of the Horological Bureau
 of the Observatory* (OBSERVATORY) 459 Prospect st.
- THOMAS H. RUSSELL, M.D.
Professor of Materia Medica and Therapeutics 137 Elm st.
- Rev. JOHN E. RUSSELL, B.D.
Winkley Professor of Biblical Theology (7 E.) 119 Grove st.
- FRANK A. GOOCH, PH.D.
Professor-elect of Chemistry
- SAMUEL W. WILLISTON, M.D., PH.D.
Assistant Professor and Demonstrator of Anatomy 113 York st.

FRANK B. TARBELL, PH.D.		
<i>Assistant Professor of Greek, and Instructor in Logic</i>		240 D.
WILLIAM BEEBE, B.A.		
<i>Assistant Professor of Mathematics</i>		83 Wall st.
ANDREW W. PHILLIPS, PH.D.		
<i>Assistant Professor of Mathematics</i>	(118 N.)	184 York st.
HENRY W. FARNAM, M.A., R.P.D.		
<i>Professor of Political Economy</i>		43 Hillhouse av.
GEORGE BENDELARI, B.A.		
<i>Assistant Professor of Modern Languages</i>		5 S.
RUSSELL H. CHITTENDEN, PH.D.		
<i>Professor of Physiological Chemistry</i>	(5 S. H.)	32 Trumbull st.
ARTHUR T. HADLEY, B.A.		
<i>Professor of Political Science</i>		51 Whitney av.
REV. GEORGE B. STEVENS, PH.D., D.D.		
<i>Buckingham Professor of New Testament Criticism and Interpretation</i>	(11 E.)	1298 Chapel st.
ALFRED L. RIPLEY, B.A.		
<i>Assistant Professor of German</i>		136 F.
WILLIAM E. WATERS, B.A.		
<i>Tutor in Latin</i>		70 N. M.
WILLIAM L. ELKIN, PH.D.		
<i>Astronomer in the Observatory</i>		477 Prospect st.
HERBERT E. SMITH, M.D.		
<i>Professor of Chemistry</i>		29 Beers st.
HORATIO M. REYNOLDS, B.A.		
<i>Tutor in Greek</i>		213 D.
REV. ALFRED B. NICHOLS, B.A.		
<i>Tutor in German</i>		153 F.
WALTER R. BRIDGMAN, B.A.		
<i>Tutor in Greek</i>		21 S.
J. ERNEST WHITNEY, B.A.		
<i>Instructor in English</i>	(2 TR.)	156 Whitney av.
FRANK F. ABBOTT, B.A.		
<i>Tutor in Latin</i>		102 N.
EDWARD T. McLAUGHLIN, B.A.		
<i>Tutor in English</i>		267 L.
WILLIAM PRICE, B.A.		
<i>Tutor in French</i>		106 Wall st.

GUSTAVE F. GRUENER, B.A.		
<i>Instructor in German</i>		58 S. M.
WILLIAM O. AYRES, M.D.		
<i>Lecturer on Diseases of the Nervous System</i>		295 York st.
MARK BAILEY, M.A.		
<i>Instructor in Elocution</i>	(150 F.)	442 Temple st.
GUSTAVE J. STOECKEL, Mus.D.		
<i>Instructor in Vocal Music</i>		207 York st.
ALBERT S. WHEELER, M.A.		
<i>Instructor in German</i>		Tremont House
J. SUMNER SMITH, B.A.		
<i>Librarian of the Linonian and Brothers</i>		
<i>Library</i>	(LIBRARY)	78 Trumbull st.
HENRY P. STEARNS, M.D.		
<i>Lecturer on Insanity</i>		Hartford
JOHN A. ROBINSON, LL.B.		
<i>Librarian of the Law Department</i>	(19 Court House)	68 East Pearl st.
Rev. WASHINGTON GLADDEN, D.D.		
<i>Lyman Beecher Lecturer on Preaching</i>		Columbus, O.
SAMUEL B. ST. JOHN, M.D.		
<i>Lecturer on Ophthalmology</i>		Hartford
HON. WILLIAM E. SIMONDS, LL.B.		
<i>Lecturer on Patent Law</i>		Hartford
HON. MORRIS W. SEYMOUR, LL.B.		
<i>Lecturer on Corporations</i>		Bridgeport
M. DWIGHT COLLIER, M.A.		
<i>Lecturer on Attachments and Executions</i>		New York City
FREDERIC R. HONEY, Ph.B.		
<i>Instructor in Instrumental Drawing</i>	(53 N. S. H.)	14 Lincoln st
OSCAR HARGER, M.A.		
<i>Assistant in Palaeontology</i>	(9 Peabody Museum)	14 University pl.
CHARLES H. FARNAM, M.A.		
<i>Assistant in Archaeology</i>		28 Hillhouse av.
JOHN P. C. FOSTER, M.D.		
<i>Instructor in Anatomy</i>		109 College st.
HENRY T. TERRY, B.A.		
<i>Instructor in Law</i>		106 N.
THOMAS W. MATHER, D.E.		
<i>Instructor in Dynamical Engineering</i>		19 Warren pl.

HARRISON W. LINDSLEY, PH.B. <i>Instructor in Architecture</i>	868 Chapel st.
SAMUEL L. PENFIELD, PH.B. <i>Instructor in Mineralogy</i>	(2 Peabody Museum) 14 s. h.
ALTON W. LEIGHTON, M.D. <i>Assistant in Drawing</i>	117 Elm st.
HORACE L. WELLS, PH.B. <i>Instructor in Analytical Chemistry</i>	14 s. h.
HENRY FLEISCHNER, M.D. <i>Lecturer on Dermatology and Clinical Medicine</i>	928 Grand av.
SAMUEL E. BARNEY, C.E. <i>Instructor in Mathematics and Civil Engineering</i>	315 Orange st.
HORACE S. KEPHART, M.A. <i>Assistant in the Library</i>	243 Orange st.
GEORGE BAUR, PH.D. <i>Assistant in Osteology</i>	(9 Peabody Museum) 49 Dixwell av.
JAY W. SEAVER, M.D. <i>Instructor in Gymnastics, and Lecturer on Practical Hygiene</i>	(1 TR.) 233 York st.
FRANK H. WHEELER, M.D. <i>Assistant in Pathology</i>	188 Crown st.
WILLIAM G. DAGGETT, M.D. <i>Lecturer on Bacteriology</i>	22 College st.
EDWARD V. RAYNOLDS, D.C.L. <i>Lecturer on Political Economy</i>	256 Bradley st.
HENRY C. WHITE, M.L. <i>Lecturer on Political Economy</i>	828 Chapel st.
LOUIS V. PIRSSON, PH.B. <i>Assistant in Analytical Chemistry</i>	8 Prospect pl.
ASAPH HALL, JR., B.A. <i>Assistant Astronomer in the Observatory</i>	Observatory
EDWARD G. BOURNE, B.A. <i>Lecturer on Political Economy, and Instructor in Mediæval History</i>	36 E.
HENRY L. SWAIN, M.D. <i>Lecturer on Diseases of the Throat and Ear</i>	159 York st.
THOMAS G. LEE, M.D. <i>Lecturer on Histology</i>	113 York st.

GRADUATE FELLOWS AND SCHOLARS

GEORGE R. FREEMAN, B.D., M.A., <i>Hooker Fellow in the Theological Department</i>	Berlin, Germany
FREDERIC A. GAYLORD, B.D., M.A., <i>Fellow in the Theological Department</i>	13 E.
JULIUS H. PRATT, JR., B.A., <i>Silliman Fellow</i>	187 C.
REV. FREDERIC L. STEVENS, B.A., B.D., <i>Hooker Fellow in the Theological Department</i>	103 W.
EDWARD G. BOURNE, B.A., <i>Foote Scholar</i>	36 E.
JOSEPH M. LEWIS, B.A., <i>Soldiers' Memorial Fellow</i>	Athens, Greece
WILBUR L. CROSS, B.A., <i>Foote Scholar</i>	43 S. M.
HERBERT H. WHITE, B.A., <i>Clark Scholar, and Larned Scholar</i>	147 Humphrey st.
CARL D. BUCK, B.A., <i>Larned Scholar, and W. W. DeForest Scholar</i>	27 S.
WASHINGTON I. HUNT, B.A., <i>Foote Scholar</i>	52 E.
CHARLTON M. LEWIS, B.A., <i>Clark Scholar</i>	108 N.
FRANK G. MOORE, B.A., <i>Macy Scholar</i>	57 S. M.
WILLIAM H. PARKS, B.A., <i>Berkeley Scholar, and Bristed Scholar</i>	131 F.
CHARLES W. PIERSON, B.A., <i>Douglas Fellow</i>	108 N.

OTHER OFFICERS

LOUIS STADTMÜLLER PH.B., <i>Clerk in the Sheffield Scientific School</i>	(3 S. H.) 43 Whitney av.
LEWIS E. OSBORN, <i>Clerk in the Treasurer's Office</i> (5 TR.)	240 Orange st.
FRANK E. HOTCHKISS, <i>Superintendent of Grounds and Buildings</i>	90 High st.
WILLABE HASKELL, PH.D., <i>Superintendent of the Reading Room</i>	(Reading Room) 96 Dwight st.
J. PRESTON STRONG, <i>Clerk in the Treasurer's Office</i> (5 TR.)	506 Howard av.
CHAUNCEY W. GOODRICH, B.A., <i>Superintendent of Dwight Hall</i>	Dwight Hall
HENRY F. GRUENER, <i>Assistant in the Library</i> (Library)	39 Whiting st.

GOVERNMENT OF THE UNIVERSITY

The legal designation of the Corporation is "THE PRESIDENT AND FELLOWS OF YALE COLLEGE IN NEW HAVEN;" the powers of this body have been granted and confirmed in the following order.

THE COLLEGIATE SCHOOL OF CONNECTICUT, subsequently named YALE COLLEGE, and now commonly called YALE UNIVERSITY, was founded in the summer of the year 1701 by the combined action of a few of the ministers in Connecticut, who obtained in October of the same year a charter from the Colony Legislature, which runs as follows:—

AN ACT FOR LIBERTY TO ERECT A COLLEGIATE SCHOOL.

WHEREAS several well disposed, and Publick spirited Persons of their sincere Regard to & Zeal for upholding & Propagating of the Christian Protestant Religion by a succession of Learned & Orthodox men have expressed by Petition their earnest desires that full Liberty and Priveledge be granted unto certain Undertakers for the founding, suitably endowing & ordering a Collegiate School within his Majesty's Colony of Connecticut wherin Youth may be instructed in the Arts & Sciences who thorough the blessing of Almighty God may be fitted for Publick employment both in Church & Civil State. To the intent therefore that all due encouragement be Given to such Pious Resolutions and that so necessary & Religious an undertakeing may be sett forward; supported & well managed:—

BE IT ENACTED by the Govern^r & Company of the s^d Colony of Connecticut, in General Court now Assembled, And it is enacted & ordained by the Authority of the same that there be & hereby is full Liberty, Right and Priveledge Granted unto the Reverend M^r. James Noyes of Stonnington, M^r. Israel Chauncey of Stratford, M^r. Thomas Buckingham of Saybrook, M^r. Abraham Pierson of Kennelworth, M^r. Samuel Mather of Windor, M^r. Samuel Andrew of Millford, M^r. Timothy Woodbridge of Hartford, M^r. James Pierpont of New Haven, M^r. Noadiah Russel of Middletown, M^r. Joseph Webb of Fairfield, being Rev^d Ministers of the Gospel & inhabitants within y^e s^d Colony,

proposed to stand as Trustees, Partners or Undertakers for the s^d School, to them and their successors, To ERECT, form, direct, order, establish, improve and att all times in all suitable wayes for the future to encourage the s^d School in such convenient place or Places, & in such form & manner & under such order & Rules as to them shall seem meet & most conducive to the afores^d end thereof, so as such Rules or Orders be not Repugnant to the Laws of the Civil Governm^t, as also to imploy the moneys or any other estate which shall be Granted by this Court or otherwise Contributed to that use according to their discretion for the benefit of the s^d Collegiate School from time to time & att all times henceforward.

And be it further ENACTED by the Authority afores^d that the before named Trustees, Partners or Undertakers together with such others as they shall associate to themselves (not exceeding the number of Eleven, or att any time being less than Seven, Provided also that Persons nominated or associated from time to time to fill up s^d number be ministers of the gospel inhabiting within this Colony & above the Age of forty years) or the major Part of them, the s^d Mr. James Noyes, [etc.] undertakers, & of such Persons so chosen & associated as aboves^d att any time hereafter, HAVE and shall have henceforward the oversight, full & compleat Right, Liberty, power & Priveledge to furnish, direct, manage, order, improve & encourage from time to time & in all times hereafter the s^d Collegiate School so Erected & formed by them in such ways, orders & manner & by such Persons, Rector or Master and officers appointed by them, as shall according to their best discretion be most conducive to attaine the afores^d mentioned end thereof.

It is also further Enacted by the Authority afores^d that the s^d Undertakers & Partners & their successors be & hereby are further impowered to have, accept, acquire, purchase or otherwise lawfully enter upon Any Lands, Tenements & Hereditam^{ts} to the use of the s^d School, not exceeding the value of five hundred Pounds p^r Ann^o, & any Goods, Chattels, Sum or Sums of money whatsoever as have heretofore already been Granted, bestowed, bequeathed or given, or as from time to time shall be freely given, bequeathed, devised or settled by any Person or Persons whatsoever upon & to & for the use of y^e s^d School towards the founding, erecting or endowing the same, & to sue for, Recover & receiv all such Gifts, Legacies, bequests, annuities, Rents, issues & profits arising therefrom & to imploy the same accordingly, & out of y^e estate, Revenues, Rents, profits, incoms accruing & belonging to s^d School to support & pay as the s^d Undertakers shall agree & see cause, the s^d Rector or Master, Tutors, Ushers or other officers their Respective annual Salaries or Allowances. As also for the encouragem^t of the Students to grant degrees or Licences as they or those deputed by them shall see cause to order & appoint.

Under this Charter the Collegiate School was begun at Saybrook, in November, 1701, where it continued until its removal to New Haven, in October, 1716. In September, 1718, the name of YALE COLLEGE was given by the Trustees to the School, in honor of the benefactions of ELIHU YALE, of London, lately Governor of the East India Company's settlement at Madras.

In 1723 an "ACT IN EXPLANATION OF AND ADDITION TO THE ACT FOR ERECTING A COLLEGIATE SCHOOL" was passed by the General Assembly, with the following provisions:—

WHEREAS Pursuant to the Powers and Privileges granted to Certain Trustees for Erecting a Collegiate School in this Colony Entituled an Act for a Collegiate School, the Said Trustees have Erected the Said School in the Town of New-Haven which School is now known by the Name of Yale Colledge; And Whereas it appears to this Assembly that an Explanation and Enlargement of the powers and privileges granted by Said Act is Necessary for the Carrying on the Affairs of the Said Colledge, for want of which it has Laboured under great difficulties very much to the prevention of that Order and good Education which is to be desired there:

Bee it therefore Enacted by the Governour, Council and Representatives in Generall Court assembled and by the Authority of the Same that the Said Act which provides that the Number of the Said Trustees be not under Seven nor above Eleven is not to be Understood or Taken so as to be restrictive of the power of the Said Trustees Never to Choose any person to be a Trustee, when there is of Such persons as have been Chosen and Acted as Trustees Eleven persons Living in the Colony or Elsewhere, but that in Case any person so Chosen be by Providence Incapacitated from attending that Service or shall himself decline the Same thro' the Necessity of his own Affairs or for any other such Reason as he shall Judge requisite, the Trustees in any of their Meetings Lawfully Called may be Understood to have and it is hereby Enacted and declared that they shall be Taken to have full power by the Majority of Such Meeting to proceed to the Choice of Another Trustee in the Room of any such person. And it is hereby further declared and Enacted to be the True Intent and Meaning of the Act afores^d that the said Trustees shall be Impowered and they are hereby declared to have power to Meet Together for Considering, Advising about and Resolving upon all Matters belonging to the Trust of the Said Colledge committed unto them as afores^d and to Agree and Con-

clude, Order and determine Concerning them by the Majority of the Said Meeting, and by the same Majority to Choose and Appoint a Clerk who shall, in a fair book prepared for that End, Register and Carefully preserve the Acts of all such Meetings.

And WHEREAS it has been doubted what Number of the Said Trustees may be Lookt upon as a Sufficient or full Meeting, Inasmuch as there is not in the afores^d Act any Express mention made of any Meeting of the said Trustees ; It is therefore to prevent all Scruple of that kind for the future hereby provided and declared that due Notice being given to the Trustees by Consent of any three of them of a Meeting of the Trustees desired at any Time or place, any Seven or more of the Trustees present at such Time and place shall be Esteemed a full Meeting. And it is hereby declared and Enacted that in all such Meetings, so Called, or Otherwise as the said Trustees in any such Meeting shall agree, all affairs under the Care of the said Trustees shall be determined by the Majority of such Meeting.

And WHEREAS it has been found Inconvenient that in the Election of Persons to be Trustees, the Trustees Election by the afores^d Act should be Limited and restrained so as that the Person who shall be Chosen must Necessarily be forty Years of age ; It is hereby declared and Enacted that for the future the said Trustees in any Election of a person into that Trust shall not be Esteemed or held Obligated by said Act to Choose such a person as shall be above forty Years of Age, but may Choose such a person otherwise Qualified According to said Act, Provided he is thirty Years of Age. And it is further hereby Allowed, Enacted, Granted and Provided that whosoever shall be Chosen and made a Rector of the said Colledge shall by Virtue thereof become a Trustee of the same and be so Esteemed and Taken during his Continuance in the said Rectorship.

In 1745 a thoroughly revised Charter was granted by the Assembly, the permanent provisions of which are as follows :—

An ACT for the more full and complete Establishment of YALE COLLEGE in NEW HAVEN, and for enlarging the powers and Privileges thereof.

WHEREAS upon the Petition of several well disposed and public-spirited Persons expressing their desire that full Liberty and Privilege might be granted unto certain Undertakers for the founding, suitably endowing and ordering a *Collegiate School*, within this Colony, wherein Youth might be instructed in the Arts and Sciences, the Governor and Company of the said Colony in General Court assembled at *New Haven*, on the Ninth Day of October, in the Year of our Lord

1701, Granted unto the Rev'd Messrs. *James Noyes* [etc.], who were proposed to stand as Trustees, Partners or Undertakers for the Society, and to their Successors, full Liberty, Right and Privilege to erect, form, direct, order, establish, improve, and at all Times in all suitable Ways to encourage the said School in some convenient Place in this Colony, and granted sundry Powers and Privileges for the attaining the End aforesaid ;

And Whereas the said Trustees, Partners or Undertakers in pursuance of the aforesaid Grant, Liberty and License, founded a *Collegiate School at New Haven*, known by the Name of YALE COLLEGE, which has received the favorable Benefactions of many liberal and piously disposed Persons, and under the Blessing of Almighty God has trained up many worthy Persons for the Service of God in the State as well as in the Church ;

And Whereas the General Court of this Colony assembled at *New Haven*, the Tenth Day of October, in the Year of our Lord 1723, did explain and enlarge the aforesaid Powers and Privileges granted to the aforesaid Partners, Trustees or Undertakers and their Successors, for the Purpose aforesaid ; as by the respective Acts, reference thereto being had, more fully and at large may appear ;

And Whereas the Rev'd Messrs. *Thomas Clap, Samuel Whitman, Jared Eliot, Ebenezer Williams, Jonathan Marsh, Samuel Cooke, Samuel Whittelsey, Joseph Noyes, Anthony Stoddard, Benjamin Lord, and Daniel Wadsworth*, the present Trustees, Partners and Undertakers of the said School, and Successors of those beforementioned, have petitioned, that the said School, with all the Rights, Powers, Privileges and Interests thereof, may be confirmed, and that such other additional Powers and Privileges may be granted as shall be necessary for the Ordering and Managing the said School in the most advantageous and beneficial Manner for the promoting all good Literature in the present and succeeding Generations :

Therefore,

THE GOVERNOR and COMPANY of his Majesty's said English Colony of *Connecticut* in General Court assembled, this Ninth Day of *May*, in the Year of our Lord 1745, enact, ordain, and declare, and by these Presents it is enacted, ordained and declared—

That the said *Thomas Clap* [etc.], shall be an *Incorporate Society or Body Corporate and Politic*, and shall hereafter be called and known by the name of THE PRESIDENT AND FELLOWS OF YALE COLLEGE IN NEW HAVEN, and that by the same Name they and their Successors shall and may have perpetual Succession, and shall and may be Persons in the Law capable to plead and be impleaded, defend and be defended, and answer and be answered unto ; and also to have, take, possess, acquire, purchase or otherwise receive Lands, Tenements, Hereditaments, Goods, Chattels, or other Estates, and the same Lands, Tenements,

Hereditaments, Goods, Chattels or other Estates to grant, demise, lease, use, manage or improve for the Good and Benefit of the said *College*, according to the Tenor of the Donation, and their Discretion.

That all Gifts, Grants, Bequests, and Donations of Lands, Tenements, or Hereditaments, of Goods and Chattels heretofore made to or for the Use, Benefit and Advantage of the *Collegiate School* aforesaid, whether the same be expressed to be made to the President or Rector, and to the rest of the Incorporate Society of *Yale College*, or to the Trustees or Undertakers of the *Collegiate School* in *New Haven*, or to the Trustees by any other Name, Style or Title whatsoever, whereby it may be clearly known and understood that the true Intent and Design of such Gifts, Grants, Bequests and Donations, was to or for the Use, Benefit and Advantage of the *Collegiate School* aforesaid, and to be under the Care and Disposal of the Governors thereof, shall be confirmed, and the same hereby are confirmed, and shall be and remain to, and be vested in the President and Fellows of the *College* aforesaid, and their Successors, as to the true and lawful Successors of the original Grantees.

That the said PRESIDENT AND FELLOWS and their Successors shall and may hereafter have a common Seal, to serve and use for all Causes, Matters and Affairs of them and their Successors, and the same Seal to alter, break and make new as they shall think fit.

That the said THOMAS CLAP shall be, and he is hereby established the present PRESIDENT, and the said *Samuel Whitman*, [etc.] shall be, and they are hereby established the present FELLOWS of the said *College*, and that they and their Successors shall continue in their respective Places during Life, or until they or either of them shall resign, or be removed, or displaced, as in this Act is hereafter expressed.

That there shall be a General Meeting of the *President and Fellows* of said *College*, in the College Library on the second Wednesday of September annually, or at any other Time and Place which they shall see Cause to appoint, to consult, advise and act in and about the Affairs and Business of the said *College*; and that on any special Emergency, the President and two of the Fellows, or any four of the Fellows, may appoint a Meeting at the said *College*, provided they give Notice thereof to the Rest by Letters sent and Left with them, or at the Places of their respective Abode, five Days before such Meeting; and that the President and six Fellows, or in Case of the Death, Absence, or Incapacity of the President, seven Fellows, convened as aforesaid (in which Case the eldest Fellow shall preside), shall be deemed a Meeting of the President and Fellows of said *College*, and that in all the said Meetings, the Major Vote of the Members present shall be deemed the Act of the Whole, and where an Equivote happens, the President shall have a casting Vote.

That the President and Fellows of the said *College* and their Successors, in any of their Meetings assembled as aforesaid, shall and may

from Time to Time, as Occasion shall require, elect and appoint a President or Fellow in the Room and Place of any President or Fellow who shall die, resign, or be removed from his Office, Place or Trust (whom the said Governor and Company hereby declare, for any Misdemeanor, Unfaithfulness, Default or Incapacity, shall be removable by the President and Fellows of the said College; six of them, at least, concurring in such Act); and shall have Power to appoint a Scribe or Register, a Treasurer, Tutors, Professors, Steward and all such other Officers and Servants, usually appointed in Colleges or Universities, as they shall find necessary and think fit to appoint for the promoting good Literature, and the well ordering and managing the Affairs of said College; and them or any of them, at their Discretion, to remove; and to prescribe and administer such Forms of Oaths (not being contrary to the Laws of England or of this Colony) as they shall think proper, to be administered to all the Officers and Instructors of the said College, or to such and so many of them as they shall think proper, for the faithful Execution of their respective Places, Offices and Trusts.

That the President and Fellows shall have the Government, Care and Management of the said College and all the Matters and Affairs thereunto belonging, and shall have Power from Time to Time, as Occasion shall require, to make, ordain and establish all such wholesome and reasonable Laws, Rules and Ordinances, not repugnant to the Laws of England, nor the Laws of this Colony, as they shall think fit and proper for the Instruction and Education of the Students, and Ordering, Governing, Ruling and Managing the said College, and all Matters, Affairs, and Things thereunto belonging, and the same to Repeal and alter as they shall think fit.

That the President of said College, with the Consent of the Fellows, shall have Power to give and confer all such Honors, Degrees or Licenses as are usually given in Colleges or Universities, upon such as they shall think worthy thereof.

In 1792 a grant of money from the State of Connecticut was received, upon the condition that certain State officials should become members of the board of Fellows, as below expressed :—

In case this grant shall be accepted, in manner as hereinafter provided, the Governor, Lieutenant Governor, and six senior assistants in the Council* of this State, for the time being, shall ever hereafter, by virtue of their said offices, be trustees or fellows of said college; and shall together with the present President and Fellows of said College, and their successors, constitute one corporation, by the name and style

* Changed in 1819 to the six senior senators.

mentioned in the charter of said College; and shall have and enjoy the same powers, privileges, and authority, in as full and ample a manner, as though they had been expressly named and included in said charter; And that in case of vacancy, by the death, or resignation, or in any other way, of any of the present Fellows of said College, and their successors, every such vacancy shall forever hereafter be supplied by them, and their successors, by election, in the same manner as though this act had never passed.

In the new Constitution of the State, adopted in 1818, the privileges conferred by the Charter were reaffirmed, as follows:—

ARTICLE VIII, SECT. I.

The charter of Yale College, as modified by agreement with the Corporation thereof, in pursuance of an Act of the General Assembly, passed in May, 1792, is hereby confirmed.

In 1872, at the request of the Corporation, an Act was passed by the General Assembly, providing (as follows) for the substitution of graduates in the place of the six senators among the Fellows:—

SECTION 1.—All graduates of the first degree, of five or more years' standing, in any of the departments of Yale College, and all persons who have been admitted to any degree higher than the first in Yale College, whether honorary or in course, may, on the day next preceding the public commencement day of said College, in the year of our Lord 1872, cast their votes, under such regulations as the President and Fellows may prescribe, for six persons to be chosen from among such graduates; and the six persons who shall be found to be elected by a plurality of the votes cast, shall be the Fellows of Yale College in the stead of the six senior senators of the State, and shall have all the rights, duties, and privileges as Fellows which are now by law conferred upon said senators. In case of an equality of votes between two or more candidates, the person who shall hold the said office of Fellow shall be designated by lot from among the persons receiving such equality of votes.

SECTION 2.—The Fellows thus elected shall enroll themselves by lot in six classes, one holding the office for six years, another for five years, another for four years, another for three years, another for two years, and another for one year, eligible for re-election; and every year as a vacancy occurs, all graduates of the first degree, of five or more years' standing

in any of the departments of Yale College, and all persons who have been admitted to any degree higher than the first in Yale College, whether honorary or in course, may, upon the day next preceding commencement day, in the manner heretofore prescribed, elect by a plurality of votes a person to fill the vacancy, and hold the office of Fellow for a period of six years, eligible for re-election; and so whenever a vacancy shall occur from death, resignation, or any other cause, such graduates may elect a person at the next commencement to fill the office of Fellow for the remainder of the term in which a vacancy has occurred. The official year of such Fellows shall end with the day next preceding each commencement day.

DEPARTMENTS OF INSTRUCTION

The courses of study offered in the University are comprehended in four Departments, under the control of the the Corporation, each Department being also under the administration of a distinct Faculty of instruction. The Departments are as follows :—

THE DEPARTMENT OF PHILOSOPHY AND THE ARTS,

THE DEPARTMENT OF THEOLOGY,

THE DEPARTMENT OF MEDICINE,

THE DEPARTMENT OF LAW.

Under the first-named Department are included two separately organized sections in which instruction for undergraduates is provided, viz :—

THE ACADEMICAL DEPARTMENT, and

THE SHEFFIELD SCIENTIFIC SCHOOL ;

also, THE SCHOOL OF THE FINE ARTS, with a special organization ; and The Courses for GRADUATE INSTRUCTION, under the combined Faculty of the Department.

It is to be understood that the courses of instruction above described are open to persons of the male sex only, except when both sexes are specifically included.

The LIBRARY, the PEABODY MUSEUM OF NATURAL HISTORY, and the OBSERVATORY are severally organized independently of the special Departments, and are designed to contribute, in their appropriate spheres, to the instruction and advancement of the whole institution.

ACADEMICAL DEPARTMENT

(YALE COLLEGE)

FACULTY

REV. TIMOTHY DWIGHT, PRESIDENT
REV. NOAH PORTER, *Professor of Moral Philosophy and Metaphysics*
ELIAS LOOMIS, *Professor of Natural Philosophy and Astronomy*
JAMES D. DANA, *Professor of Geology and Mineralogy*
EDWARD J. PHELPS, *Professor of Law*
HUBERT A. NEWTON, *Professor of Mathematics*
ARTHUR M. WHEELER, *Professor of History*
J. WILLARD GIBBS, *Professor of Mathematical Physics*
ARTHUR W. WRIGHT, *Professor of Molecular Physics and Chemistry*
REV. WILLIAM M. BARBOUR, *Professor of Divinity*
EUGENE L. RICHARDS, *Assistant Professor of Mathematics*
WILLIAM I. KNAPP, *Professor of Modern Languages*
FRANKLIN B. DEXTER, *Professor of American History, and Registrar*
TRACY PECK, *Professor of Latin*
WILLIAM G. SUMNER, *Professor of Political and Social Science*
REV. GEORGE T. LADD, *Professor of Mental and Moral Philosophy*
HENRY P. WRIGHT, *Professor of Latin, and Dean*
HENRY A. BEERS, *Professor of English Literature*
EDWARD S. DANA, *Assistant Professor of Natural Philosophy*
THOMAS D. SEYMOUR, *Professor of Greek*
FRANK A. GOOCH, *Professor-elect of Chemistry*
FRANK B. TARBELL, *Assistant Professor of Greek*
WILLIAM BEEBE, *Assistant Professor of Mathematics*
ANDREW W. PHILLIPS, *Assistant Professor of Mathematics*
GEORGE BENDELARI, *Assistant Professor of Modern Languages*
ALFRED L. RIPLEY, *Assistant Professor of German*
WILLIAM E. WATERS, *Tutor in Latin*
HORATIO M. REYNOLDS, *Tutor in Greek*
REV. ALFRED B. NICHOLS, *Tutor in German*
WALTER R. BRIDGMAN, *Tutor in Greek*

J. ERNEST WHITNEY, *Instructor in English*
FRANK F. ABBOTT, *Tutor in Latin*
EDWARD T. McLAUGHLIN, *Tutor in English*
WILLIAM PRICE, *Tutor in French*
GUSTAVE F. GRUENER, *Instructor in German*

OTHER INSTRUCTORS

WILLIAM D. WHITNEY, *Professor of Linguistics and Sanskrit*
MARK BAILEY, *Instructor in Elocution*
WILLIAM C. ROBINSON, *Professor of Law*
DANIEL C. EATON, *Professor of Botany*
JAMES K. THACHER, *Professor of Zoology*
HENRY T. TERRY, *Instructor in International Law*
WILLIAM R. HARPER, *Professor of the Semitic Languages*
ARTHUR T. HADLEY, *Professor of Political Science*
HERBERT E. SMITH, *Professor of Chemistry*
JAY W. SEAVER, M.D., *Instructor in Gymnastics and Practical Hygiene*
EDWARD G. BOURNE, *Instructor in Mediæval History*

From the date of the original Charter, in 1701, a course of instruction leading to the degree of Bachelor of Arts has been continuously offered at the College ; at first only three years of undergraduate study were required, but before 1710 a four years' course was provided, which has since been maintained.

Until 1813, when a Medical School was organized, no other course of study for a degree was marked out at Yale College ; but with the incorporation of the Medical Institution (as it was originally styled) the older Department began to be designated The Academical Institution (or Department), and has continued to be so designated until at length, with the growth of other Schools about it and the expansion of the whole into Yale University, the original title of Yale College has again come to be applied distinctively to this Department.

TERMS OF ADMISSION

ALL CANDIDATES FOR ADMISSION to the Freshman Class are examined in the following books and subjects :

1. Latin Grammar.
2. Caesar—Gallic War, books i-iii.*
3. Cicero—Orations against Catiline and for Archias.*
4. Vergil—Bucolics, and first six books of the Aeneid, including Prosody.
5. Ovid—Metamorphoses, translation at sight.
6. The translation, at sight, of passages from prose Latin.
7. The translation into Latin of connected passages of English prose.
[As special importance is given to this part of the examination, it is suggested to teachers that they connect exercises in making Latin, both oral and written, with all the Latin studies of the preparatory course.]
8. Roman History: Creighton's Primer of Roman History is suggested, as a basis for instruction.

-
9. Greek Grammar.
 10. Xenophon—Anabasis, three books.*
 11. Homer—Iliad, two books, with Prosody.*
 12. The translation, at sight, of a passage from some work of Xenophon.
 13. The translation of English into Greek: Jones's Exercises, White's Lessons, and Keep's Lessons are suggested, as indicating the preparation required.
 14. Greek History.

-
15. Higher Arithmetic—including the metric system of weights and measures.
 16. Algebra—so much as is included in Loomis's Treatise, up to the chapter on Logarithms.
 17. Plane Geometry.

18. French or German—so far as to translate at sight easy prose, the candidate being at liberty to decide for himself in which of the two languages he shall be examined.

* After 1887, the requirement in Caesar will be books i-iv of the Gallic War; in Cicero, the Orations against Catiline and for Archias, and, in addition, either the Marcellus and the 14th Philippic, or the Milo, or the Manilian Law, or the Cato Major; in Xenophon's Anabasis, four books; and in Homer's Iliad, three books.

Candidates are allowed to divide the examination, with an interval of not less than one year between the two parts. In such cases, they must present themselves at the *June* examination of the first year; and at this preliminary examination each candidate must submit a definite statement from his principal instructor of the subjects which he is authorized to offer. No candidate will be allowed to offer French, German, Geometry, the translation at sight of prose Latin, or of prose Greek, at a preliminary examination; and at the close of such an examination, no certificate of partial admission will be furnished, unless at least six subjects have been satisfactorily passed.

THE REGULAR EXAMINATION FOR ADMISSION to College is held at Alumni Hall, New Haven, on Thursday, Friday, and Saturday after Commencement (June 30, July 1, 2, 1887): *attendance is required at the opening of the examination, at 9 A. M. on Thursday*, and the sessions will close Saturday noon. The examination is wholly in writing; a set of papers recently given will be sent by the Secretary on application.

In 1887 examinations (beginning on Thursday, June 30, at 9 A. M.) for admission to the Freshman Class (but not to higher classes) will also be held in Andover, Mass., New York City, Chicago, Cincinnati, and San Francisco, at places to be announced in the local newspapers of the day previous. Candidates who propose to be present (elsewhere than at New Haven) are requested to send their names to the Secretary before June 15. A fee of five dollars is charged for admission to examinations outside of New Haven. The College is also prepared to hold an examination, at the above-named time, in any city or at any school where the number of candidates and the distance from other places of examination may warrant it; applications for this purpose must be sent to the Secretary before June 1.

A second examination (for those who cannot attend the first) is held in New Haven at the beginning of the College year, on Tuesday and Wednesday (Sept. 20, 21, 1887); candidates for this examination must be present at Alumni Hall at 9 A. M. on Tuesday.

Persons applying for admission to any of the classes in College during the course of the College year (that is, from September to June) must first obtain from the Faculty permission to be examined, and pay to the Treasurer a fee of ten dollars.

In general, examinations for admission to the next Freshman Class can be held only in June and September as specified; if in any case sufficient reason exists for an exception to this rule, a special fee (not exceeding fifty dollars) will be charged.

ADVANCED STANDING—All candidates for advanced standing, *whether from other Colleges or not*, are examined in addition to the preparatory studies, in those studies already pursued (see pp. 32 ff.) by the class which they wish to enter. In the several languages, for the particular books studied by the class equivalent amounts from other books may be offered. Certificates of standing elsewhere cannot be accepted in place of these examinations, although they may be taken into account as collateral evidence of fitness for admission.

Bachelors of Arts or of Philosophy of any institution may join the Senior Class (without examination and without becoming candidates for the Bachelor's degree), as candidates for the degree of Doctor of Philosophy after three years' study.

No one can be admitted to the Senior Class after the beginning of the second term.

AGE—No one can be admitted to the Freshman Class till he has completed his fifteenth year, nor to an advanced standing without a corresponding increase of age.

TESTIMONIALS—Satisfactory testimonials of good moral character (preferably from the last principal instructor) are in all cases required, before a certificate of admission in full can be granted; such testimonials are not required at a preliminary examination. Students from other Colleges must present certificates of dismissal in good standing.

BOND—Every person must give to the Treasurer, on being admitted, a bond, executed by his parent or guardian, for five hundred dollars, as security for the payment of charges arising under the laws of the College. A blank form for this purpose will be furnished at the time of admission.

GOVERNMENT AND INSTRUCTION

The Dean has the general supervision under the Faculty of the Senior and Junior Classes; the members of the two lower Classes are assigned by divisions for a similar supervision to the care of the several instructors in those Classes. Absence from College exercises will be excused only for extremely urgent reasons. In general, a student cannot be excused for absence at the beginning or near the end of the term.

In order to cover all cases of absence which may seem justifiable to the student, but for which no excuses will be accepted, an allowance is granted to a member of the Senior or Junior Class of absence from eight class-room exercises (recitations, lectures, or rhetorical appointments), and to a member of the Sophomore or Freshman Class from six class-room exercises, during the first term and during each half of the second term, without incurring marks and without affecting his record for scholarship; provided that these absences shall not immediately precede or follow a vacation or recess; provided, also, that no two absences shall be consecutive in any one study, and that such absences shall not excuse the student from preparation upon the omitted lessons when reviewed.

The members of each of the three lower classes are arranged at the beginning of each term in divisions according to scholarship. During the present year, for required work the Senior Class is divided into two divisions, the Junior Class into three, the Sophomore Class into four, and the Freshman Class into five divisions; in the elective courses, the divisions are of convenient size for class-room work.

Greek, Latin, Mathematics, and English, occupy thirteen hours of class-room work per week in Sophomore year, and the first term of Freshman year, and twelve hours per week during the second term of Freshman year. Three hours of class-room work per week during Freshman year, and two hours per week during Sophomore year, are given to Modern Languages.

If a student can pass a satisfactory examination in any of the prescribed studies for the work of one year in advance, he may be allowed to choose from the list of Electives (see p. 35) some other course which he is qualified to pursue with advantage, covering the same number of hours.

In the Freshman and Sophomore years all the work is *prescribed*. The kind and amount of study in these two years are believed to be such as are essential for laying the foundation of a liberal education, whatever the department or profession that may be pursued in after-life; and no more than is needed to give the student a proper basis of knowledge and discipline for the study of the *elective* courses which follow, and that knowledge of himself, and of the subjects before him which is needed for a judicious choice. The basis is necessarily a broad one. The only prominent departments not now in this foundation, either in the preparatory or college work, though pursued in the later elective courses, are those of the Natural Sciences and Chemistry. As some knowledge of these departments, of their methods of reasoning, of the use of the words "species" and "genus," and some idea of the system of nature, is essential to the student of almost any branch of philosophy, as well as to those who may take the elective courses in these sciences, it is recommended that the student should include the study of the elements of some departments of the Natural Sciences, and of Chemistry, in his preparation for College.

Of the work of the Junior year a little more than half and of that of the Senior year four-fifths is in elective courses. The whole number of elective studies open to

the two classes is at the present time ninety-two; and in addition there are several courses of lectures, attendance on which is optional. The Juniors have open to them elective studies in the English Language and Literature, History, Political Science, and the Natural Sciences, in addition to those in the departments of the Classics, the Modern Languages, and Mathematics; and the Seniors, electives under all these departments, along with others of higher range as particularly explained below.

Many of the courses fall naturally into groups: as that of the Ancient Languages and Linguistics; Psychology, Logic, and Philosophy, with Ethics; Political Science and Law; History; Modern Languages and Literature; Mathematics and Physics; Chemistry and the Natural Sciences; and the student is recommended to select his courses as far as possible according to his needs, in part perhaps according to his expectations as to future work, fixing first upon the chief subject, and selecting others that are subsidiary to it. In several cases, related courses are accessible to the student only as they are taken consecutively.

To promote the rational choice of elective courses, SPECIAL HONORS in the various groups of studies are offered, to be given at the end of the Senior year, according to the scheme on page 55.

THE PROGRAM OF STUDIES for the current year is as follows:

FRESHMAN YEAR:

Greek—Homer's *Odyssey* (six books); the Panegyric of Isocrates; Herodotus (50 pp., selections from books i and ii); Xenophon's *Cyropaedia* (60 pp.); the *Alcestis* of Euripides; Greek Prose Composition. (Students especially proficient in Greek will be assigned to an advanced section.)

Latin—Cicero *De Senectute* and *De Amicitia*; Cicero's Letters; Livy, books xxi and xxii; the Satires of Horace; Latin Prose Composition; History of Rome under the Triumvirates.

French or German—Three hours a week throughout the year. Students may at their option either continue the study of the modern language presented for admission to college, or begin the study of German in case they have not previously pursued it. Those who have sufficient knowledge of either language will be assigned to classes still further advanced.

Mathematics—In *Geometry*: Symmetry, Loci, Proportions, Theory of Limits, Measurement of the Circle, Planes, Polyhedrons, Cones, Cylinders, and Spheres. Projection of figures with exercises on Models. Text-book, Chauvenet's *Geometry*.

Plane Trigonometry: Solution of Triangles, Mensuration and Surveying. Text-book, Richards's *Trigonometry*.

Algebra: The Geometrical interpretation of the Theory of Equations, Imaginaries, and the Solution of Higher Equations. Text-book, Phillips & Beebe's *Graphic Algebra*.

SOPHOMORE YEAR:

Greek—The *Antigone* and *Electra* of Sophocles; the *Prometheus* of Aeschylus; the *Acharnians* of Aristophanes; Plato's *Apology* and *Crito*.

Latin—*Agricola* and *Germania* of Tacitus; *Odes* and *Epodes* of Horace (70 pp.); *Selections* from Catullus (40 pp.); *Menaechmi* of Plautus; *Roman Antiquities*.

Modern Languages—Advanced French, or advanced German, at the option of the student, two hours a week throughout the year. Those who so desire may begin the study of German, in case they have never pursued it.

Mathematics—*Trigonometry*: Trigonometric Analysis. Spherical Trigonometry. Applications to Navigation and Astronomy. Text-book, Richards's *Trigonometry*.

Analytical Geometry: Plane and Solid, with Applications to Map Projection. Text-book, Loomis's *Analytical Geometry*.

Mechanics—The elementary principles of Kinematics, Kinetics (or Dynamics), and Statics, in reference to solid bodies, with practical applications. Text-book, Dana's *Mechanics*.

English—Readings and discussions of classical prose, including Sidney's *Defense of Poetry*, Bacon's *Select Essays*, Milton's *Areopagitica*, specimens of Jeremy Taylor, Dryden, Steele, Addison, and Burke. Special attention is given to rhetorical analysis. In connection with this and as an additional preparation for composition, an optional course in representative prose, partly classical but especially of the present century. Three plays of Shakspeare (*Twelfth Night*, *Julius Cæsar*, and *Hamlet*), with lectures and literary discussions.

Rhetoric—See paragraph on the next page.

JUNIOR AND SENIOR YEARS:

The *prescribed* courses of Junior year occupy seven hours per week, and those of Senior year three hours per week. In addition, each member of the Junior class is required to select eight hours per week, and each member of the Senior class twelve hours per week, from the list of *elective* courses.

PRESCRIBED STUDIES OF JUNIOR YEAR:

Physics—Ganot's *Physics*: during the first term the subject of Liquids, Gases, Sound, and Heat, with experimental illustrations in the class-room; during the second term, the subject of Magnetism and Electricity, with weekly experimental lectures.

Astronomy—Loomis's *Treatise on Astronomy*.

Logic—Jevons's *Lessons in Logic*; Fowler's *Inductive Logic*; exercises in the criticism of arguments; lectures.

Geology—Dana's *Text-book of Geology*.

Psychology—Porter's *Elements of Intellectual Science*, Introduction, First, Second and Third Parts; lectures.

PRESCRIBED STUDIES OF SENIOR YEAR:

Psychology—Porter's *Elements of Intellectual Science*, Fourth Part; Lotze's *Outlines of Psychology*; lectures.

Ethics—Porter's *Elements of Moral Science*.

Theism, and the Evidences of Christianity—lectures.

RHETORIC AND ELOCUTION:

Rhetoric—English Composition. Four themes a year are required from each member of the Senior, Junior, and Sophomore classes; these themes are read and corrected by the instructors in Rhetoric. For premiums in this department see p. 66.

Elocution—Sophomore Year: Lectures on the Science and Art of Elocution,—logical analysis,—vocal analysis, expression, and culture,—oratorical action. Practice in speaking and recitation by sub-divisions of twelve each. Individual instruction and private drill in preparation for speaking in divisions of eighteen per week before the class and the Professor of Rhetoric for the "Prizes for Declamation."

Junior Year: Three weeks of preparatory training for the speakers at the Junior Exhibition.

Senior Year: Three weeks of preparatory training for the speakers at Commencement.

ELECTIVE COURSES

Juniors select eight hours per week, and Seniors twelve hours per week, from the following list. All the courses are open to members of either class unless some limitation is specified. The number of hours specified means, in every case, hours per week. When a course is stated as occupying "both terms," it cannot be abandoned during the year.

I. MENTAL AND MORAL SCIENCE

Ex-President PORTER :—

- 1 *Philosophy.* [Seniors.] 2 hrs. 1st term.
J. S. Mill on the Philosophy of Sir William Hamilton.
- 2 *Ethics.* [Seniors.] 1 hr. 2d term.
Martineau on Types of Ethical Theory.
- 3 *Political Ethics.* [Seniors.] 1 hr. 2d term.

Professor LADD :—

- 4 *Physiological Psychology.* 2 hrs. both terms.
A study (illustrated by charts and models) of the human nervous mechanism, of the principal relations which exist between changes in this mechanism and the activities of the mind, and a discussion of the conclusions which may be drawn from these relations respecting the nature and laws of the mind.
- 5 *Modern Philosophy.* [Seniors.] 2 hrs. 2d term.
A survey of the development of philosophical thought from Descartes to Lotze and Herbert Spencer, with a special examination of the main problems of philosophy, in the form in which they were brought forward by Kant, and have been discussed subsequently with reference to his philosophical thinking.

Assistant Professor TARBELL :—

- 6 *Greek Philosophy.* [Seniors.] 2 hrs. 1st term.
Mayor's Sketch of Ancient Philosophy; Grant's Aristotle; Wallace's Epicureanism; supplementary notes [printed]. The pre-Socratic philosophers are passed over rapidly, only the Atomists receiving careful attention. Nearly half the time is given to Socrates, Plato, and Aristotle, and the remainder to the post-Aristotelian schools.

- 7 *Logic.* [Seniors.] 2 hrs. 1st term.
 Mill's System of Logic; parts of books II, III, and VI. This course consists mainly of an examination of Mill's views on the following subjects: the relation of deduction to induction; causation; the proof of the uniformity of nature; explanation; hypothesis; the logical methods appropriate to the study of social science.
- 8 *Logic.* 1 hr. 2d term.
 Venn's Logic of Chance. This course deals with "the foundations and province of the theory of probability, with especial reference to its logical bearings, and its application to moral and social science."

II. POLITICAL SCIENCE AND LAW

Professor SUMNER:—

- 9 *Political Economy*, short course. 3 hrs. 1st term.
 This course is designed for those whose chief interest lies in other departments of study, but who desire to become acquainted with the elements of political economy.
 [This course is given in 1886-87 by Professor Hadley.]
- 10 *Political Economy*, short course. 3 hrs. 1st term.
 Very elementary, for those who want a short course but would find the preceding course too difficult.
 [This course is given in 1886-87 by Professor Hadley.]
- 11 *Political Economy*, long course. 2 hrs. both terms.
 Mill, Cairnes, and selected chapters from Fawcett.
- 12 *Political Economy*, long course. 2 hrs. both terms.
 Fawcett and text-books on American currency and banking.
 Courses 11 and 12 cover substantially the same ground, i. e., the fundamental principles of the subject, the former being much more difficult and thorough, but also more satisfactory to those who are competent to master it, and who desire to give especial attention to this subject.
 All who take Political Economy meet together for lectures on the leading topics, especially land, capital, currency, banking, and taxation. Problems for practice in the application of principles, and as subjects for theses, are given out from time to time. Informal meetings for conversation and questions are also held.
- 13 *Political Economy*, advanced. 2 hrs. 2d term.
 Study and discussion of economic problems and fallacies, with selected passages from the leading treatises. Open only to those

who have taken one of courses 9-12. A loan library of standard treatises is provided in such number that each student can have a copy of each always at hand. Those who take this course will be examined at the June semi-annual on designated passages in Adam Smith, Cairnes, Jevons, and Marshall.

Professor HADLEY :— [Seniors.] 2 hrs. 2d term.

14 *Socialism.*

An account of recent movements in political and economic thought. Rae's *Contemporary Socialism*; George's *Progress and Poverty*.

Mr. TERRY :—

15 *International Law.* [Seniors.] 2 hrs. 1st term.

Lectures and recitations. Woolsey's *International Law*.

Professor ROBINSON :—

16 *Law.* [Seniors.] 2 hrs. 2d term.

The origin, history, and general principles of the common law, and of American constitutional law. Robinson's *Elementary Law*; Cooley's *Constitutional Law*.

III. HISTORY

Professor WHEELER :—

17 *English History*, short course. [Seniors.] 3 hrs. 2d term.

Attention is confined chiefly to the Tudor and Stuart periods. Constitutional liberty versus arbitrary power.

18 *English History*, long course. [Seniors.] 2 hrs. both terms.

Political and constitutional history. Particular attention is paid to the origin and development of the system of self-government. The course is of special value to those who intend to study law.

19 *History of Europe since 1815.* [Seniors.] 4 hrs. 1st term.

Mainly political. Introductory to European politics of our day.

NOTE.—The loan library of History, founded by the liberality of about twenty graduates of the University, is for the use of students in the historical courses. It contains at present nearly 500 volumes, relating chiefly to the subjects of courses 17, 18, and 19. Other works which may be needed, will be added to the collection from time to time.

Professor DEXTER :—

20 *American History.* 2 hrs. 1st term.

Colonial history to 1765. Lodge's *Short History of the English Colonies in America* is used as a basis of instruction.

21 *American History.* 2 hrs. 2d term.

History of the United States from 1765 to 1865. A printed outline of the topics to be taken up, with lists of authorities, is furnished to the students before each exercise, and they are required to prepare themselves on the topics indicated, by means of books reserved for their use in the Library or otherwise accessible to them.

22 *American History, short course.* 1 hr. 2d term.

This course covers less thoroughly the entire ground of the two preceding courses. The exercises are conducted on the same plan as in course 21.

Assistant Professor BENDELARI:—

23 *History of Continental Europe.* [Juniors.] 3 hrs. both terms.

Political history and political geography from the Thirty Years' War to the French Revolution.

Mr. ABBOTT:—

24 *Roman History.* [Juniors.] 2 hrs. 2d term.

History of religion in the Empire: in particular, the religious tracing under Augustus; the relations of the imperial government to Christianity during the first four centuries. Rise of Mohammedanism. Papers to be prepared by students; recitations and lectures.

Mr. BOURNE:—

25 *Early Mediæval History.* 2 hrs. 1st term.

26 *Later Mediæval History.* 2 hrs. 2d term.

Courses 25 and 26 are designed to give a general view of European history between the fourth and sixteenth centuries, tracing the development of the modern nations.

27 *History of the Reformation.* 1 hr. 2d term.

The political and religious changes of the period.

Courses 25, 26, 27, are conducted partly by recitations, partly by lectures.

IV. MODERN LANGUAGES

Assistant Professor RIPLEY:—

28 *German Composition.* 2 hrs. both terms.

A course entirely devoted to written and oral work in German composition. Themes in German written and criticized; practice in reading German without translation; lectures.

29 *German Poetry.* 3 hrs. both terms.

A course for advanced students only. A critical study of selected poems of Goethe, and of the first part of Faust, with study of Goethe's life. Constant use will be made of critical and biographical works in German.

30 *Advanced German Prose.* 3 hrs. both terms

Selections from the works of Lessing, Herder, Goethe, Schiller, Jean Paul, Gervinus, H. Grimm, Scherer. Written translation from German into English.

Mr. NICHOLS:—

31 *German.* 3 hrs. both terms.

Lessing: Minna von Barnhelm, Emilia Galotti. Goethe: Götz von Berlichingen, Egmont. Schiller: Don Carlos, Die Jungfrau von Orleans. Scheffel: Der Trompeter von Säckingen.

32 *German Novels and Plays.* 3 hrs. both terms.

A course for rapid reading, with constant translation at sight; fluency in translation, and not critical study, being aimed at.

Assistant Professor RIPLEY:—

33 *Elementary German.* 3 hrs. both terms.

Grammar, translation, composition, and reading at sight.

Professor KNAPP:—

34 *Early and Classic French.* 3 hrs. both terms.

Sixteenth and seventeenth century authors: Rabelais, Montaigne, Marot; Corneille, Molière, Racine, Boileau, etc.

35 *Old French.* 2 hrs. both terms.

Chanson de Roland; Les anciens monumens de la langue française. Translation into modern French.

36 *Elementary Spanish.* 3 hrs. both terms.

Knapp's Grammar and Reader. Novels of Caballero, Truëba and Galdós. Exercises and conversation.

37 *Advanced Spanish.* 3 hrs. both terms.

Composition, conversation, and reading of Cervantes's Novels, Quevedo's Visions, plays of Lope de Vega and Calderon.

38 *Old Spanish.* 2 hrs. both terms.

The poets from the thirteenth to the fifteenth century. Poem of the Cid. Translations into Modern Spanish.

Assistant Professor BENDELARI:—

39 *Elementary Italian.* 3 hrs. both terms.

Toscani's Grammar; composition; De Anicis, Manzoni, Golloni.

- 40 *Advanced Italian.* 3 hrs. both terms.
Modern Plays ; composition ; classical writers (Tasso, Macchiavelli, Boccaccio, Dante) ; Italian the only medium of instruction.

Mr. BRIDGMAN :—

- 41 *Modern Greek.* 2 hrs. 2d term.
Geldart's Guide to Modern Greek ; reading of newspapers and a comedy ; as much conversation as possible.

Professor BEERS :—

- 42 *Anglo-Saxon and English.* 2 hrs. both terms.
A two years' course, Anglo-Saxon and Early English ; Sweet's Anglo-Saxon Reader ; Mätzner's *Altenglische Sprachproben* ; Beowulf ; Earle's History of Anglo-Saxon Literature ; tenBrink's Early English Literature.

- 43 *English Literature.* [Seniors.] 3 hrs. both terms.
First term : Literature of the Elizabethan and Commonwealth periods. Readings in Spenser, Shakspeare, Bacon, Milton, and other authors. Lectures. Text-book : Morley's First Sketch of English Writers. Second term : Literature of the 19th century. Lectures and reading course. Text-book : Mrs. Oliphant's English Literature in the 19th century.

Mr. J. E. WHITNEY :—

- 44 *English Literature.* [Juniors.] 3 hrs. both terms.
Brooke's Primer of English Literature. Lectures on the History of English Literature. Critical readings in Chaucer's Canterbury Tales, Spenser's Faerie Queene, Shakspeare's Plays, Milton's Poems, Bacon's Essays, with a course of outside reading.
- 45 *History of the English Language.* [Juniors.] 1 hr. 2d term.
Lounsbury's History. Lectures. Studies of specimens of the language of different periods.

Mr. McLAUGHLIN :—

- 46 *Old English Dramatists.* 2 hrs. 2d term.
Selected plays of Lyly, Greene, Marlowe, Marston, Tourneur, Dekker, Jonson, Beaumont and Fletcher, Middleton, Webster, Massinger and Ford. Lectures on the rise of the English drama and its development up to 1640.

NOTE.—A special loan library of several hundred volumes of important works in English literature, consisting of fifteen to twenty duplicate copies of each work, is used for supplementary reading courses in connection with the several English electives.

V. ANCIENT LANGUAGES AND LINGUISTICS

Professor HARPER :—

- 47 (a) *Hebrew*. 4 hrs. both terms.
 Genesis I-VIII, and with these chapters the principles of the Hebrew language; critical reading of selected chapters in the Pentateuch; rapid reading in Exodus and Deuteronomy; lectures on Hebrew Poetry and Pentateuch-criticism.
- (b) *Arabic*. 2 hrs. both terms.
 Arabic version of Genesis, chapters I-IV, and with these chapters the principles of the language (Lansing's Arabic Manual); selected portions of the Kuran; lectures on contents and arrangement of the Kuran.
- (c) *Assyrian*. 2 hrs. 2d term.
 Principles of the language; practice in reading the cuneiform text of Lyon's Assyrian Manual and Delitzsch's Lesestücke; lectures on Assyrian History and Literature.

Professor W. D. WHITNEY :—

- 48 *Sanskrit*. 4 hrs. both terms.
 A first year's instruction in Sanskrit, beginning with the instructor's Sanskrit Grammar, and passing on to Lanman's Reader. A sketch of Sanskrit literature is given in connection with the exercises during the latter part of the year.
- 49 *Linguistics*. 1 hr. 2d term.
 A series of exercises—mingled lecture, recitation, and discussion—on the leading topics of the general study of language, following and using as text-book the instructor's Life and Growth of Language, is given if a class of six or more is formed.

Professor PECK :—

- 50 *Tacitus, Suetonius, Lucretius, and Vergil*. 2 hrs. both terms.
 The Annals [I-VI] of Tacitus, and Suetonius's Life of Tiberius. Three books of Lucretius. Selections from all the works of Vergil.
- 51 *Latin Composition*. 2 hrs. both terms.
 Exercises in writing and speaking.
- 52 *Cicero*. 2 hrs. 1st term.
 Cicero's Brutus; particular attention given to the history of oratory among the Romans.
- 53 *Horace*. 2 hrs. 1st term.
 Interpretation of all the Epistles. The poetry of the Augustan age.

- 54 *Quintilian and Martial.* 2 hrs. 2d term.
 Quintilian : Books 10 and 12. Selections from Martial. The literature and Latinity of the silver age.
- 55 *Early Latin.* [Seniors.] 1 hr. 2d term.
 Allen's Remnants of Early Latin. Specimens of the earliest literature. This course is largely philological, and is open only to those who have taken at least one Latin elective during the first term.

Professor H. P. WRIGHT :—

- 56 *Juvenal.* 2 hrs. 1st term.
 Satires of Juvenal, with study of the private life of the Romans.

Mr. WATERS :—

- 57 *Petronius.* 2 hrs. 1st term.
 Selections from Petronius's *Cena Trimalchionis*, with special reference to the study of morals during the reign of Nero. Occasional work is done on the peculiarities of Low Latin. The text used is Bücheler's. Considerable use is made, also, of Friedländer's *Sittengeschichte*.
- 58 *The Latin Elegiac Poets.* 2 hrs. 2d term.
 Selections from Tibullus, Propertius, and Ovid ; Vahlen's *Elegiac Poets* and Riese's *Ovid*. In connection with this course, a course of ten or twelve lectures is given upon the Greek and Alexandrian Elegy, and upon the elegiac writers of the Augustan age.

Mr. ABBOTT :—

- 59 *Plautus.* 2 hrs. 1st term.
 The *Trinummus* and *Mostellaria*.

Professor SEYMOUR :—

- 60 *Homer.* 2 hrs. 1st term.
 Introduction to the critical study of the Homeric poems. Lectures on epic poetry. The Homeric poems in antiquity and their transmission to the present time. The Homeric language and verse. Life in the Homeric age. Critical interpretation of the first book of the *Iliad*.
- 61 *Plato.* 2 hrs. 1st term.
 The *Phaedo* of Plato as an introduction to the literary and philosophical study of Plato.
- 62 *Greek Drama.* 2 hrs. 1st term.
 The *Prometheus* of Aeschylus and the *Electra* of Sophocles.

- 63 *Homer.* 2 hrs. 2d term.
The Iliad of Homer. A rapid reading of its principal parts.
- 64 *Theocritus and Aristophanes.* 2 hrs. 2d term.
Fifteen idyls of Theocritus and the Acharnians of Aristophanes.
- 65 *Greek Inscriptions.* 2 hrs. 2d term.
Exercises in the interpretation of Greek inscriptions based upon
Cauer's *Delectus Inscriptionum Graecarum*, as an introduction
to the historical study of Greek forms.
- 66 *Aristotle.* 2 hrs. 2d term.
Nicomachean Ethics.

Mr. REYNOLDS:—

- 67 *Attic Prose Writers.* 2 hrs. 1st term.
A course for rapid reading and translation at sight. Selected
orations of Lysias, Andocides on the Mysteries, Xenophon. The
course illustrates incidentally the social life of Athens at the close
of the Peloponnesian war.
- 68 *Greek Drama.* 2 hrs. 2d term.
Euripides: *Bacchae*, *Hecuba*, *Ion*, *Cyclops*; a course for rapid
reading.

Mr. BRIDGMAN:—

- 69 *Demosthenes.* [Juniors.] 2 hrs. 1st term.
A rapid reading of the Oration on the Crown, with some notice
of the history of the period.

VI. NATURAL AND PHYSICAL SCIENCE

Professor LOOMIS:—

- 70 *Practical Astronomy.* [Seniors.] 4 hrs. 1st term.
Loomis's *Practical Astronomy*. Students have the free use of
a portable transit instrument for observations.
- 71 *Meteorology.* [Seniors.] 2 hrs. 2d term.
Loomis's *Meteorology*. Daily study of the current weather
maps of the signal service.

Professor J. D. DANA:—

- 72 *Geology.* [Seniors.] 2 hrs. 1st term.
Dana's *Geology*. This course is a continuation and expansion
of the required *Geology* of Junior year.

Professors J. D. DANA and E. S. DANA :—

73 *Geology and Petrography*. [Seniors.] 2 hrs. 2d term.

During the first half of the second term this course is a continuation of course 72, and is limited to those who have taken that course. During the second half of the second term it is carried on by Professor E. S. Dana as a course in Petrography, including the examination of thin sections of rocks under the microscope. Some preliminary work on the optical properties of minerals is done by the class.

Professor EATON :—

74 *Botany*. [Juniors.] 2 hrs. 2d term.

The course is limited to twenty who pass the best examination in Gray's Lessons in Botany.

75 *Pteridology and Bryology*. [Seniors.] 2 hrs. 1st term.

The course is limited to six who do best in the botany of Junior year. The two hours constitute a single exercise weekly.

Professor A. W. WRIGHT :—

76 *Physics*. [Seniors.] 2 hrs. both terms.

Two exercises each week, chiefly practical work in the Sloane Physical Laboratory, with measurements, especially in heat, light, and electricity, each exercise occupying two hours. As introductory to the laboratory practice, the exercises, during a portion of the first term, consist of recitations or discussions upon the theory and methods of physical measurements, the use of instruments, and other special topics. Laboratory facilities are also accorded to students of the course at other times than those of the stated exercises. Kohlrausch's Physical Measurements; Glazebrook and Shaw's Practical Physics; Kempe's Handbook of Electrical Testing; Everett's Units and Physical Constants, etc.

Professor THACHER :—

77 *Zoology*. [Juniors.] 4 hrs. 1st term.

Dissection of a small number of typical animals. Lectures on classification of animals. Lectures and recitations on physiology. Huxley and Martin's Elementary Biology; Huxley's Elementary Physiology.

Professor E. S. DANA :—

78 *Mineralogy and Crystallography*. [Sen.] 2 hrs. both terms.

Practical study of the more important mineral species by means of blowpipe analysis and other methods; mathematical study of crystals by the methods of analytical and spherical geometry; also,

the optical properties of crystals, including the phenomena exhibited by them in polarized light. Dana's Text Book of Mineralogy, 1882.

Professor H. E. SMITH :—

79 *Chemistry*. [Seniors.] 4 hrs. 2d term.

A special laboratory fee is charged in this course.

VII. MATHEMATICS

It is strongly recommended by all the instructors in the mathematical department that those who intend to study advanced mathematics, or the natural and physical sciences, or who expect to become engineers, should take course 80 in the Calculus in Junior year.

Professor NEWTON :—

80 *Calculus*, long course. 3 hrs. both terms.

81 *Calculus*, short course. 3 hrs. 1st term.

This course is especially intended for those whose studies are chiefly in some other department, but who wish to get some idea of the methods of the Calculus.

82 *Integral Calculus and Mechanics*. [Sen.] 3 hrs. both terms.

Mean values and probability; differential equations; analytical statics and dynamics.

Professor GIBBS :—

83 *Vector Analysis*. [Seniors.] 2 hrs. 1st term.

Elementary course, in which the simpler problems of geometry, kinematics, and mechanics are treated by vector methods.

84 *Vector Analysis*. [Seniors.] 2 hrs. 2d term.

Advanced course, open only to those who have taken the preceding. The same methods are applied to electricity.

Professor E. L. RICHARDS :

85 *Higher Trigonometry*. 1 hr. both terms.

Exponential and logarithmic series; DeMoivre's theorem; theory of proportional parts; applications.

Assistant Professor BEEBE :—

86 *Geodesy*. 2 hrs. both terms.

First term: land surveying; field work with the theodolite. Second term: trigonometrical surveying; methods of the United States coast survey; figure of the earth; astronomical problems.

This course is especially adapted for students who expect to study civil engineering after graduating. Open only to those who take the Calculus. At the end of the first term this course may be abandoned to enter course 87 or course 92.

87 *Theoretical Astronomy.* 2 hrs. 2d term.

Development of formulæ and their application to the numerical computation of cometary orbits, ephemerides, and perturbations. Open only to those who have taken the Calculus.

88 *Theoretical Astronomy*, advanced. [Sen.] 1 hr. 1st term.

Continuation of the preceding course.

89 *Theoretical Astronomy*, advanced. [Seniors.] 1 hr. 2d term.

Continuation of the preceding course.

Professor PHILLIPS:—

90 *Analytical Geometry.* 2 hrs. 1st term.

Special topics in analytical geometry of two and three dimensions. Open only to those who take the Calculus.

91 *Analytical Geometry.* 2 hrs. 2d term.

Continuation of the preceding course.

92 *Descriptive Geometry.* 2 hrs. 2d term.

The principles of orthographic projection, and shades and shadows.

The following statements are added, to explain the general aim and scope of the instruction in various leading subjects of study.

GREEK—During the first two years, the student reads five or six books of Homer, dramas of Aeschylus, Sophocles, and Euripides, one or two comedies of Aristophanes, selections from the history of Herodotus, one or more orations of Demosthenes, Isocrates, or Lysias, the Apology or some dialogue of Plato; occasionally, the Symposium of Xenophon or selected dialogues of Lucian. These works are selected with a view to making the student familiar with the leading branches of Greek literature, and the most interesting phases of Greek life and thought. The most important grammatical principles are reviewed in Freshman year; in Sophomore year, grammatical questions are discussed rarely, except as they are necessary for the interpretation and illustration of the author's meaning. In reading the works of the poets, less attention is paid to linguistic and grammatical points than to their literary quality, to the structure of the poems, to poetic words, forms,

arrangement of words, rhythm, and constructions; but the growth and development of the language are discussed as well as the development of the literature. In reading the orators and historians, the connection of thought and of events is made prominent. Greek prose composition is practised only so far as to aid the student in reading Greek authors, and to quicken his perception of nice distinctions in the order and choice of words and constructions.

In the optional courses of the Junior and Senior years, the student has the opportunity of reading the works of the lyric poets, other Greek dramas and other dialogues of Plato, parts of Aristotle (his *Politics* and *Ethics*), and the idyls of Theocritus; as well as of studying Greek inscriptions, and of doing more critical work on the Homeric poems than is suited to the first College year; and of learning the Modern Greek language. The history of Greek philosophy is studied. Students are also allowed to attend Professor Hoppin's fully illustrated lectures on Greek art, in the Art School.

LATIN is continued as a required study till the close of the Sophomore year, when it is intended that the student shall have gained clear conceptions of the genius of the language and its relations to other ancient and to modern tongues, a good knowledge of the characteristics of Latin literature and the essential facts of Roman history, and some appreciation of the position of Rome in the history of civilization. That subsequent reading of the language may be more easy and more exact, due attention is given in the early part of the course to forms, constructions, and idioms. From term to term the study of the literature is made more prominent, and the particular texts are treated as means for the study of the public and private life of the Romans. Instruction is given mainly by recitations, but such work is supplemented by occasional lectures by the instructors and by conferences on papers presented by the pupils. In connection with the minute study of the authors, considerable time is given to oral and written reading at sight, and to composition in Latin.

For Juniors and Seniors who desire to continue their Latin studies parallel courses are offered by different instructors, with different ends in view and by different methods. The characteristic of a course may be, *e. g.*, literature, or history, or philology, or antiquities, or the speaking and writing of Latin, and the methods of preparation and the class-room treatment vary accordingly. Topics suggested by the nature of the courses, or by individual tastes and intentions, are assigned to students, and papers thus prepared are discussed before the class. Lectures and the rapid reading of large amounts of text are more frequent than in the prescribed courses. The connection of Latin with English is emphasized, and written translations are from time to time required and criticised with reference both to their faithful reproduction of the Latin

thought and their idiomatic English. German annotated editions are often used, not only for their intrinsic helpfulness, but also to encourage the practical use of that language. Students who give evidence of unusual capacity and attainments may be admitted to membership of graduate classes.

MATHEMATICS—In Geometry the exercises consist in recitations from the text-book, the original demonstration of theorems, and applications of the principles to the solution of numerical problems.

After the student has gained facility in the use of trigonometrical tables, the principles of Plane Trigonometry are applied to the problems of Mensuration, Surveying, and Navigation, and those of Spherical Trigonometry to the elementary problems relating to the celestial sphere.

In Algebra the elementary principles of the theory of equations are illustrated graphically, and the student is exercised in the numerical solution of equations of the higher degrees and the graphical representation of the relations of quantities.

In Analytical Geometry the student is carried through the elementary properties of the lines and surfaces of the second degree, and is introduced to the theory of map projection.

These are studies of the Freshman and Sophomore years, and together with the elements of Astronomy which are pursued in Junior year, are regarded as essential parts of a liberal education.

In the Junior and Senior years opportunity is given in the elective courses to obtain a wider knowledge of Analytical Geometry and Trigonometry with their applications to Geodesy and Astronomy. A longer and shorter course are provided in Junior year in Differential and Integral Calculus. The shorter course is designed for students who desire to become acquainted with the methods of the Calculus but whose principal studies are not of a mathematical character. The longer course is designed for such as expect to make a serious study of any department of pure or applied mathematics.

In Senior year advanced subjects in the Calculus and the elements of Analytical Mechanics form one line of study.

An elementary and an advanced course are provided in what is called Vector Analysis. The object of these courses is to introduce the student to the methods of multiple algebra in geometry, mechanics, and physics. The matter taught is not entirely unlike that usually given in courses in Quaternions, but the method followed is in some respects nearer to Grassmann's than to Hamilton's. The elementary course is confined to the simplest algebraic relations of vectors. The advanced course includes differentiation with respect to position in space, and the theory of linear vector functions.

Students who show special aptitudes are exercised in the working up

of subjects which require the use of the library and more prolonged investigation than the daily exercises of the class-room. Such work begins in Freshman year. There is a considerable collection of models, which are used to assist the imagination in the various branches of study.

ENGLISH—Courses in English are given in one term of Sophomore year and throughout the Junior and Senior years. In the first term of Sophomore year works of various authors are studied with particular attention to whatever may help to inculcate the principles of good writing. The object is to prepare the students for composition work, which continues throughout the college course from the first term of Sophomore year. During Sophomore and Junior years the compositions are read and corrected by the instructor, who afterwards meets each student and discusses his work with him. These meetings vary from fifteen minutes to an hour or more for each, as may be expedient.

With Junior year the study of English Literature properly begins. It is the aim to give a general acquaintance with a wider range of English writings than is usually accessible to a large body of students. For this purpose a special library of from twenty to thirty duplicate copies of the most useful editions of many writers has been established for supplementary readings. This library will be enlarged from time to time.

The main line of work, however, is designed to give through the class-room a critical familiarity with the great representative writers of the various epochs, and with the history of the literature and language.

Through Junior and Senior years a course of two hours a week is given in Anglo-Saxon and Early English.

Consecutive courses, three hours a week, in modern English Literature are given through Junior and Senior years. In the first term of Junior year, in connection with literary history, the best of Chaucer's *Canterbury Tales* are studied in Morris's *Selections in the Clarendon Press Edition* and in a larger edition of the entire work. Sufficient attention is paid to grammatical peculiarities to remove the chief difficulties in understanding any Middle English writer, and the students are taught to pronounce and read as Chaucer is supposed to have done. The connected course of outside reading includes Mandeville's *Travels*, large selections from Child's *English Ballads*, various poems by Chaucer, and other works. The first book of Spenser's *Faery Queene* is then taken up in class-room, and outside readings are required in Spenser's other works, in Skelton, and in others.

Early in the second term of Junior year the study of Shakspeare begins. Dowden's *Primer* is used, as a basis for the study of his work as a whole. In the class-room six or eight principal plays are read and discussed. The outside readings are in Shakspeare, Jonson, Marlowe, and others.

A course open to Juniors and Seniors two hours a week through the

second term is given to those who wish a more intimate knowledge of the origin and growth of the English Drama. A considerable number of selected plays of the dramatists are read and a series of lectures is given.

In the latter part of Junior year Milton's minor poems and the first six books of *Paradisé Lost* are studied in class-room, and outside readings are required in Milton's other works and in a number of writers of his age, Cowley, Donne, Herbert, Herrick, Marvell, etc.

In the first term of Senior year the study of the literature of the Elizabethan and Commonwealth periods is finished, the work centering around Shakspere, Bacon, Milton, and the dramatists. Outside reading is required in the Elizabethan and Commonwealth writers, and the literary history is followed in a text-book and in a course of weekly lectures. The second term is devoted to the literature of the 18th and 19th centuries. The literary history is followed as in the previous term. To the outside readings more attention is given than in previous terms. Students prepare for examinations on portions of the writings of Dryden, Pope, Goldsmith, Johnson, Cowper, Burns, Coleridge, Wordsworth, Byron, Shelley, Keats, Tennyson, Browning, and other poets, and in the prose of the *Spectator*, the early novelists, the essayists of the 19th century, etc.

A course of one hour a week through the second term of Junior year is offered to those who wish a good acquaintance with the history of the English language and its dialects. After finishing a text-book, the English vocabulary is studied in specimens of the speech of different periods and in groups of words from various languages, thus showing the condition and changes of the vocabulary at different times, its composite nature, and the relative value of the contributions from other languages. Some attention is paid to the history of individual words.

GERMAN—The student may pursue the study of German during each of the four years of his College course, if he so elect. While the study may be begun at the opening of any of the four years, it is strongly urged that the elementary work be done as early in the College course as possible, in case the student proposes to take up the language at all.

The courses of work for the successive years may be outlined as follows. During the first year the work consists of German grammar, translation of easy English phrases, sentences, and stories into German, and of easy German prose into English. Constant sight-translation is used as a means for developing and strengthening the student's vocabulary and for freeing him from dependence upon the lexicon and from the word-by-word methods which its use encourages. Especial care also is devoted to pronunciation. The work of the second year continues and extends that of the first year, taking up the translation of German prose, narrative, critical and historical, composition and sight-

translation. Throughout the two years the aim in reading German is to cover as much ground as possible—from 500 pages upwards—in the belief that thereby the student will acquire more command of the language than when a smaller amount is read with rigid attention to grammatical details. It is expected that at the end of the second year the student will be able to use the language in his work in other branches of study. Those, therefore, who are studying German solely with this end in view may perhaps abandon the language at this point; but no student should begin the language unless he expects to devote at least two years to its study.

For the remaining years the elective courses vary from year to year; but opportunity is given for the critical study of some of the masterpieces of German literature and for the study of periods in its history. Those who so elect may also have opportunity to take up the earlier German literature and to study the historic development of the grammar of the language. In this latter course all work will be done in German.

German readings are given by the instructors outside the regular College work, and advanced classes in composition formed, where German alone is spoken. German is constantly read aloud in the class-room, and all efforts, both in the class-room and in private, are made to improve the student's pronunciation and to help him to acquire some facility in expressing his ideas in German. But it is not a leading aim in the instruction in German to enable the student to converse in that language. Training in the ordinary conversational idiom may be had more profitably elsewhere and cannot form any considerable part of the class-room work. The student may acquire the language as a tool for use in other departments of study and may come in contact with the best works of German literature, studying their form and contents, and the lives and environment of their authors; fluency in conversation must be acquired where the conditions are more fitted to the object which they are to effect.

FRENCH—This course may extend through the entire four years, involving the study of the leading epochs of the language and literature from their inception to the present; embracing especially, with reference to English origins, the *Norman* dialect of the Old French as exhibited in the *Chanson de Roland*, the *Roman de Rou*, and the *Fabliaux* of Marie de France; in the XV. and XVI. centuries the works of Villon, Marot, Rabelais, and Montagne, as representatives; the drama from the earliest *Mystères*, *Farces*, *Soties*, to Garnier, Corneille, Molière, and Racine; in satire and criticism, Boileau; dwelling particularly on the foreign and national influences that moulded the language till it assumed its actual form. Attention throughout the earlier years is given to composition in French as the best method for training the attention, the memory and the judgment, and the oral use of the language is

insisted on for the courses in the Classical and Old French periods. Instruction is given by recitation, and lectures in French will hereafter be read on the history of the language and literature, on which written French examinations will be required.

PHYSICS—The required course in Physics extends over two-thirds of the Junior Year with four exercises each week. The general design of the course is to make the student acquainted with the fundamental principles of the science, to enable him to understand something of the methods of experiment and reasoning by which physical laws have been established, and to give him an insight into the degree of accuracy demanded in physical work. The subject of Electricity is treated at somewhat greater length than the other branches, and is fully illustrated by experimental lectures; in this direction the recent equipment of the Sloane Laboratory makes the department especially strong. During the Senior Year there is an opportunity for those students desiring to avail themselves of it, to go forward with practical laboratory work, as is described in the list of elective courses (No. 76).

POLITICAL SCIENCE AND LAW—The organization of the department of political science and law is at present imperfect, because, the Juniors having been allowed to choose political economy in 1886 for the first time, the present is a transition year. In the next academic year there will be a class of undergraduates who will have studied the elements for a year. Hereafter, therefore, there will be an opportunity for those who desire to give two years' study to subjects in this department to take the elements in Junior year. Courses will be offered to such persons, in Senior year, in the history of political economy, industrial history, economic problems, sociology, and other lines of study extending over the field of political and social science. Those who do not wish to devote special attention to this department will have an opportunity, either in Junior or Senior year, to take either long or short courses in the elements of political economy. It is the policy of the department to break the classes up into small divisions, and to grade the divisions as far as possible, so that the instructor can give close attention to the needs and interests of the students. In the present year each of the long courses is broken into three divisions, averaging thirty-three men each. Lectures are used to illustrate and develop topics incidentally to the class room work. This policy makes heavy demands on the time of the instructors, and prevents them from offering as great a number and variety of courses as they otherwise might, but it is believed that it is far more conducive to the real advancement of the students than any other plan.

The course in Law is intended to treat of municipal and international law as parts of a liberal education. The object is to study civil institutions in their theory and in their positive form. The instruction is

elementary, dealing with the fundamental facts and principles which underlie the civil polity of the American State in their simplest form. The intention is to give the student either correct knowledge of such essential facts about the life of the State and its accepted doctrines, as every educated man should possess, or to lead up to the professional study of law.

MENTAL AND MORAL SCIENCE, AND PHILOSOPHY—The courses in this branch of study begin in Junior year, and continue until graduation. During two-thirds of Junior year and the whole of Senior year, three hours per week of class-room work in Logic, Psychology, Ethics, and the Evidences of Religion, are required of every student; the remainder of the work in these and kindred subjects is elective.

LOGIC—In this subject there is an elementary required course, occupying three hours a week during the first term of Junior year. In this course attention is centered on the principles of correct definition and valid proof. A large part of the work of the students consists in the oral and written discussion of examples of definition and of deductive and inductive argument, the examples being partly in the condensed form usual in text-books on Logic, partly in the form of somewhat extended quotations from various authors on subjects of general interest. At the same time, and although the minutiae of the traditional Logic are ignored, pains is taken to secure the disciplinary value of the study as a training in abstract thinking and abstract statement. Advanced elective courses of a more philosophical character are given in Venn's *Logic of Chance* and *Mill's System*. In the latter of these, short critical papers are from time to time prepared by the students.

PSYCHOLOGY—Required work in this subject begins with the last half of the second term of Junior year and continues nearly through the first term of Senior year,—the course thus comprising about twenty weeks of instruction in all. Although the earlier part of the course is taught with constant use of a text-book, upon which daily recitations are exacted, considerable time from the first is taken by the teacher in oral instruction, critical or supplementary of the text. One or more formal lectures on selected topics in Psychology are given each week. During the later part of the course, after the pupils have acquired some facility in the general subject, the instruction is chiefly by lectures upon the basis of a text-book. The course is completed by lectures discussing the doctrine of the Mind's nature, and its relation to the body. The course in Physiological Psychology extends through the entire year and is taught by lectures and recitations; it is illustrated by constant use of models, charts, apparatus for mixing color-sensations, etc. It is designed to go briefly over the whole ground of the modern experimental and physiological study of mental phenomena; especially as regards

reflex and automatic cerebral action, the localizing of cerebral function, the quality and quantity of sensation, psychometry, and the physical basis of the higher faculties. It may be elected either in Junior year as preparatory, or in Senior year as supplementary, to the required course in introspective Psychology.

HISTORY OF PHILOSOPHY—The study of this subject is elective and confined to Senior year. In the study of the History of Greek Philosophy the principal emphasis is laid upon Plato and Aristotle, and upon the post-Aristotelian Schools, as illustrating the permanent and most interesting problems of Philosophy.

The course in Modern Philosophy begins in January of the Senior year. It is taught both by recitations from the text-book, with accompanying remarks from the teacher, and by lectures. Effort is made to secure from each pupil the careful reading of at least one work of some prominent philosopher of the period considered in the class-room. Special emphasis is laid upon the philosophy of Kant; and a course of lectures, lasting several weeks, is delivered in exposition of selected extracts from his Critique of Pure Reason. Pains is taken to trace the development of modern speculative thought so as to throw light upon the principal questions in debate among present writers in philosophy.

PHILOSOPHY—In addition to the study of Philosophy as connected with the problems of rational Psychology, and as illustrated and enforced by the history of the development of Philosophy, the works of one or more of the leading authors are read and discussed, with such students as take the elective courses opened for this purpose. In this way the more general studies in Metaphysics and Ethics are supplemented by special information regarding selected subjects and writers.

MORAL SCIENCE, as a study, is intimately connected with the instruction in Psychology and Philosophy, as its foundations are discovered in the constitution of the human soul, and its method and fundamental relations are justified and enforced by those principles which are essential to all scientific thinking. In the department of Moral Science and of Practical Ethics, a somewhat thorough course is required of the entire Senior class, as an essential element of a thorough education and an important condition for practical usefulness. This general course is supplemented by special classes in scientific and practical Ethics, and particularly in the history and criticism of ethical theories, which are maintained through the year. In connection with these courses, a full course of lectures is delivered upon the nature, evidences and authority of Christian Theism and the Christian History, particularly as related to a sound ethical theory of man and his destiny. This course of lectures is attended by all the members of the Senior class, and a thorough examination enforced.

SPECIAL HONORS

Special Honors are conferred at the end of Senior year.

One-year honors may be taken in any one of the following groups of studies; two-year honors in any one of groups 2, 4-7:

(1). Philosophy. (2). Political Science, History, and Law. (3). English. (4). Ancient Languages. (5). Modern Languages (exclusive of English). (6). Natural and Physical Science. (7). Mathematics.

A candidate for a one-year honor must announce his intention to the Dean on or before December 1 of Senior year; a candidate for a two-year honor to the same by the same date of Junior year.

A candidate for a one-year honor must pursue with distinction in his Senior* year, and a candidate for a two-year honor in his Junior and Senior years, courses (whether prescribed or elective) amounting to an average of at least six hours per week in one of the specified groups. For a two-year honor the work must be so distributed that an average of at least four hours per week shall be taken in Junior year.

A candidate for either honor[†] must present a meritorious thesis before May 1, of his Senior year.

[In the department of Modern Languages, elementary German will not be reckoned for honors. In the department of Mathematics, no student will be considered a candidate for honors, unless he has taken the Calculus.]

TERMS AND VACATIONS

THE PUBLIC COMMENCEMENT is held on the last Wednesday in June. The first term begins twelve weeks from the day after Commencement-day and continues thirteen weeks; the second term begins on the first Thursday in January and continues until Commencement-day, with a Spring Recess—of eight days—including Easter. (See Calendar,

* But in group 3, work done in Junior year in English will be accepted in place of an equivalent amount of work done in Senior year.

p. 6.) There is also a recess at Thanksgiving, usually extending from Wednesday afternoon to Monday forenoon. The exercises of each term begin with prayers in the Chapel on Thursday morning.

PUBLIC WORSHIP

PRAYERS are attended in the Battell Chapel, with reading of the Scriptures and singing, every week-day morning, at 8.10 a. m., at which service the attendance of the students is required.

PUBLIC WORSHIP is held in the Chapel on Sundays, at which all the students are required to attend, except such as have special permission to attend the worship of other denominations, to which their parents belong. Such permission can be obtained only on presenting to the President or the Dean a written request therefor from the parent or guardian.

DWIGHT HALL, a building erected on the College square, at the expense of Elbert B. Monroe, Esq., of Southport, Conn., and presented to the Corporation in October, 1886, is designed to furnish an attractive center for the religious life of the students of all the Departments, especially through the organized work of the Young Men's Christian Association of Yale College.

LIBRARIES AND READING ROOMS

The Library of the University, containing over 130,000 volumes, is open every week-day to all the students for consultation and for the drawing of books; in a separate part of the building is the Linonian and Brothers Library, a collection of nearly 30,000 volumes in general literature, specially selected for the use of the undergraduate students.

The College Reading Room, containing the principal newspapers and periodicals, American and foreign, is open to the students every day and evening without charge. There is also a reading room and a select library (partly for circulation and partly for reference) in Dwight Hall.

THE GYMNASIUM

THE GYMNASIUM is designed to provide all the students with opportunities for exercise, under the advice of a Medical Director, who is a regularly educated physician. Members of the Freshman Class are required, during a part of the year, to take exercise in light gymnastics under the instruction of the Medical Director; and any student may enter the class of general gymnastics, which is under the Medical Director's immediate care. A thorough physical examination and measurement of each student is made yearly by the Medical Director, and a record of these results is kept as a basis of advice as to exercise and regimen; an examination of this record shows that the standard of health of the average student improves during his College course.

Members of the other Departments of the University may avail themselves of the privileges of the Gymnasium (including the advice of the Medical Director, the use of the apparatus, bowling alleys, and shower-baths) on the payment to the janitor, in advance, of a small fee.

EXPENSES

THE TREASURER'S BILLS are made out and delivered to the students three times a year, viz: at the close of the first term, and at the middle and at the close of the second term, at which times they are payable. The bills must be paid within two weeks after the beginning of the succeeding term or half-term, or interest is charged from the date of the bills, and the student is liable to be prohibited from reciting. Drafts on Boston, New York, and Philadelphia will be received at par.

The annual charge for tuition is one hundred and forty dollars, including incidentals. An additional charge of eighteen dollars is made to each student in the last bill of the senior year, to cover the expenses of graduation.

ABSENCE ON LEAVE—A student who is absent from College on account of sickness, or for any other cause, and retains his place in his class, pays full tuition during such

absence ; such payment is required before the student can be admitted to examination.

BOARD is obtained at prices varying from three and a half to seven dollars a week. The average price is about five dollars.

Rooms—There are in the College buildings nearly two hundred and fifty rooms occupied by students, at prices varying (according to location) from \$20 to \$160 per year. These rooms are not furnished, and the rates charged do not include heat, light, or rent in vacation.

Farnam College (built in 1869-70) is named in commemoration of Henry Farnam, Esq., of New Haven, who bore the chief part of the expense of its erection ; Durfee College (built in 1870-71) commemorates in like manner the generosity of Mr. Bradford M. C. Durfee, of Fall River, Mass.; Lawrance College (built in 1885-86) owes its name to a gift for this purpose from Mrs. Francis C. Lawrance, of New York City, in memory of her son, Thomas Garner Lawrance, of the Class of 1884, who died during his Senior year in College.

Students living out of College are not allowed to room in any building in which a family does not reside, except by special permission of the Faculty.

The rooms on the fourth floors of North College and North Middle College (rented at prices ranging from \$40 to \$70), and a few others in Durfee College, Farnam College, and Lawrance College (at higher prices), are reserved each year for members of the Freshman Class ; these rooms are all heated by steam, for which an additional charge of from \$25 to \$30 per year is made. Applications for rooms from those who expect to enter the Freshman Class in this College in September, 1887, should be sent to Professor Henry P. Wright (the locating officer), not later than June 1. As no single rooms are reserved, every application should be signed by two persons who wish to occupy a room together.

Members of the Junior, Sophomore, and Freshman Classes, occupying any of the College rooms (except those

on the fourth floors of North College and North Middle College) may retain the same rooms for another academic year, by making application in writing to the locating officer, on or before Saturday, May 28, 1887. Rooms not reserved will then be offered to the three Classes in order: choices will be allotted to the Junior Class on Tuesday, May 31, to the Sophomore Class on Thursday, June 2, and to the Freshman Class on Tuesday, June 7.

All students who wish rooms in College are usually able to obtain them after Freshman year.

PRICES OF ROOMS IN COLLEGE

NOTE.—The amount given is for the year, not including vacations; with a few exceptions, each room accommodates two persons.

\$20.—188, 189 Old Chapel.

\$25.—33, 49 South Middle; 65, 66, 67, 68, 81, 82, 84 North Middle; 98, 99, 114 North.

\$30.—2, 3, 18 South; 97, 100, 113, 116 North.

\$35.—1, 4, 17, 20 South; 190, 191 Old Chapel.

\$40.—34, 50 South Middle; 71, 74, 75, 78, 79, 87, 90, 91, 94, 95 North Middle.

\$45.—38, 39, 42, 43, 46, 47, 54, 55, 59, 62, 63 South Middle.

\$50.—69, 72, 73, 76, 77, 80, 85, 88, 92, 93, 96 North Middle; 103, 106, 107, 110, 111, 119, 123, 126, 127 North.

\$55.—6, 7, 10, 11, 14, 15, 22, 23, 26, 27, 30, 31 South.

\$60.—40, 44, 45, 48, 56, 60, 61, 64 South Middle.

\$63.—133, 137, 141, 167, 171, 175 Farnam.

\$65.—37, 41, 53, 57 South Middle; 244 Lawrance.

\$70.—101, 104, 105, 108, 109, 112, 120, 124, 125, 128 North; 155, 160 Farnam; 182, 183 Lyceum; 186, 187, 192, 193 Old Chapel.

\$75.—8, 9, 12, 13, 16, 24, 25, 28, 29, 32 South; 180 Lyceum.

\$92.—130, 131, 134, 135, 138, 139, 140, 142, 143, 144, 145, 146, 147, 148, 149, 151, 152, 154, 156, 157, 158, 159, 161, 162, 164, 165, 168, 169, 172, 173, 174, 176, 177 Farnam.

\$100.—250, 251, 260, 261, 270, 271, 281 Lawrance.

\$115.—129, 132, 163, 166, 170 Farnam.

\$120.—178, 179 Lyceum; 248, 249, 258, 259, 268, 269, 279 Lawrance.

\$130.—202, 204, 206, 208, 209, 210, 211, 212, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 235, 237, 239 Durfee; 241, 242, 245, 246, 247, 252, 253, 254, 255, 256, 257, 262, 263, 264, 265, 266, 272, 273, 274, 277, 282 Lawrance.

\$140.—201, 203, 234, 238 Durfee.

\$150.—280 Lawrance.

\$160.—278 Lawrance.

The subjoined table gives near estimates of the ordinary annual expenses in College, *omitting clothing and vacation charges.*

	Lowest.	General Average.	Very Liberal.
Treasurer's bill (tuition and incidentals),	\$140	\$140	\$140
Rent and care of half-room in College,	10	45	80
Board, 37 weeks,	130	200	260
Furniture, average of half-room for 4 years,	8	20	50
Fuel (steam-heat) and light, for half-room,	14	18	25
Washing,	15	27	45
Text-books and stationery,	10	30	50
Subscriptions (to College Societies, Sports, Periodicals, etc.),		30	100
Private servant, for special care of room,			25
Sundries,	6	70	175
Total,	\$333	\$580	\$950

BENEFICIARY AID

The sum of \$11,000 and upwards, derived partly from permanent charitable funds, is annually applied by the Corporation for the relief of students who need pecuniary aid, especially of those preparing for the Christian ministry. In this amount are included the income of the LANGDON FUND, of four thousand dollars, bequeathed in 1835 by Solomon Langdon, of Farmington, Conn., and a portion of the income of the ELLSWORTH FUND, now over fifty-six thousand dollars, received since 1858 from the estate of the Hon. Henry L. Ellsworth (Yale College 1810); both these funds are used for the support of students intending to enter the ministry.

There is also a LOAN FUND, for the benefit of needy students, which has been constituted from repayments made to the Treasury by former students who have received aid during the College course. No deserving student who will make good use of the opportunities of the College need be deterred from entering it by the cost of tuition. Those needing aid should apply to the President before November 1st in each College year. Assistance will be withdrawn

from students who incur serious College censure, or who fail to maintain a reputable scholarship.

THE MORGAN FUND, bequeathed by the late Henry T. Morgan, of New York City, has been set apart by the Corporation, with the provision that the income shall be divided into scholarships (at present forty-one in number, yielding \$115 each), to be assigned by the Faculty for the benefit of indigent and deserving students.

THE HARMER FOUNDATION OF SCHOLARSHIPS, the proceeds of a bequest in 1854 from Thomas Harmer Johns (Yale College 1818), of Canandaigua, N. Y., comprises six scholarships, each yielding one hundred dollars a year, to be given to deserving students of small means.

THE LYON SCHOLARSHIP FUND, of forty-four hundred dollars, given in 1869-72 by Mr. Morris W. Lyon (Yale College 1846), of New York City, benefits four scholars, selected for their worth and need by the founder or the Faculty.

THE LUCIUS HOTCHKISS FUND, of ten thousand dollars, the bequest of Lucius Hotchkiss, Esq., of New Haven, in 1881, comprises four scholarships, the income of which is given to indigent and deserving students.

There are nineteen other Scholarship Funds, most of them of one thousand dollars, the income of which may be given to such students as shall be selected by the founders or the Faculty. In this number are included Scholarships named in commemoration of William Allen, Charles Atwater, William S. Charnley, William E. Dodge, Thomas H. and Luther Fuller, Sereno Gaylord, Samuel Holmes, Elisha C. Jones, William A. Macy, John S. Mitchell, Peter Parker, Messrs. Raymond and Bordwell, and John Spaulding.

There are also opportunities for students in need of aid to render service to the College as monitors, etc.; in this way about seven hundred dollars is disbursed annually. And in general it should be said that the other means of self-help at the command of students are sufficient to enable many of those who have spare time to provide for the larger part of their College expenses.

By the liberality of Mr. W. L. Andrews, of New York City, a well furnished library has been established, containing text-books and works of reference, to be loaned gratuitously to those students who have need to avoid the expense of purchasing such books. Permission to use this library can be obtained from the President.

FELLOWSHIPS AND SCHOLARSHIPS

THE DOUGLAS FELLOWSHIP, with an income of six hundred dollars a year, was founded in 1873, by Mrs. Samuel Miller, of New Haven, and named in memory of her brothers, the Rev. Sutherland Douglas (Y. C. 1822) and George H. Douglas (Y. C. 1828). The incumbent, who must be a recent graduate of this Department, pursuing non-professional studies in New Haven, is elected annually, but no person shall hold the Fellowship for more than three years.

THE SOLDIERS' MEMORIAL FELLOWSHIP, with an annual income of six hundred dollars, was founded in 1875 by Mrs. Theodosia D. Wheeler, of New Haven, in honor of the alumni who fell in battle as Union soldiers, in the war of 1861-1865, and in special remembrance of William Wheeler, of the Class of 1855. The incumbent must be, at the time of his election, a graduate of this Department, of not more than three years' standing. He shall pursue non-professional studies, and may hold the Fellowship for a period not exceeding five years. In selecting the incumbent, the President and Professors are to give preference to one who has shown special proficiency in Greek; and for the further prosecution of Greek study, the Fellow may be allowed to spend a part or the whole of the time of his incumbency in Athens, in connection with the American School of Classical Studies, instead of in New Haven.

THE SILLIMAN FELLOWSHIP, founded in memory of Professor Benjamin Silliman, Professor of Chemistry, Mineralogy, and Geology in Yale College from 1802 until his death in 1864, has an annual income of six hundred dollars, and is awarded to a graduate of this Department who has

given evidence of proficiency and promise in some branch of physical science. The incumbent is elected annually, but no person shall hold the Fellowship for more than three years.

THE BERKELEY SCHOLARSHIP, founded in 1733 by the Rev. George Berkeley, Dean of Derry, and afterwards Bishop of Cloyne, and yielding about fifty-five dollars a year, is awarded to the student in each Senior Class who passes the best examination (which must be a creditable one) in the Greek Testament (Pauline Epistles), the first book of Thucydides, the first six books of Homer's Iliad, Cicero's Tusculan Questions, Tacitus (except the Annals), and Horace; provided he remain in New Haven as a graduate, one, two, or three years.

THE CLARK SCHOLARSHIP, being the income of a fund of two thousand dollars, given for this purpose by Mr. Sheldon Clark, of Oxford, Connecticut, is awarded in each Senior Class to the applicant who has passed the best examinations in the studies of the course; provided he remain in New Haven one year or two years immediately after graduation, pursuing a course of study (not professional) under the direction of the Faculty.

THE BRISTED SCHOLARSHIP, founded in 1848 by Mr. Charles Astor Bristed (Yale College 1839), of New York City, and yielding about one hundred and twenty dollars a year, is awarded, whenever there is a vacancy, to the student in the Sophomore or Junior Class who passes the best examination in the classics and mathematics. The successful candidate receives the annuity (forfeiting one-third in case of non-residence) until the end of the third year after graduation.

THE FOOTE SCHOLARSHIPS, founded in 1873 by a bequest of Harry W. Foote (Yale College 1866), of New Haven, and yielding five hundred dollars a year, are awarded to graduates of this Department, selected by the Corporation, who remain in New Haven for one or more years pursuing studies in the graduate courses of the Department of Philosophy and the Arts.

THE LARNED SCHOLARSHIP, founded in 1877 by the bequest of Mrs. Irene Larned, of New Haven, and yielding three hundred dollars a year, and tenable for three years, is awarded in each Senior Class. The incumbent must reside in New Haven, pursuing a course of advanced study under the direction of the Faculty.

THE MACY SCHOLARSHIP, being the income of a fund of ten thousand dollars, derived from a bequest of the Rev. William A. Macy (Yale College, 1844), of Shanghai, China, who died in 1859, is awarded, whenever there may be a vacancy, to a recent graduate of distinguished scholarship, who may hold it for a term of three years. He shall reside in New Haven, pursuing a course of non-professional study, and shall at the close of each college year present a meritorious thesis in evidence of his work during the previous year.

THE WOOLSEY SCHOLARSHIP, the gift of President Woolsey, in 1846-48, being the income of a fund of one thousand dollars, is awarded to the student in each Freshman Class, who passes the best examination in Latin Composition (excellence in which is essential to success), in the Greek of the year, and in the solution of algebraic problems. The successful candidate receives the annuity, under certain conditions, during the four years of his College course. The student who stands second at this examination receives for one year the income of the HURLBUT SCHOLARSHIP FUND, of one thousand dollars (established by Henry A. Hurlbut, Esq., of New York City, in 1859); and the student who stands third, the income for one year of the THIRD FRESHMAN SCHOLARSHIP FUND, of the same amount, given by Charles M. Runk, Esq., of Allentown, Pa., in 1865.

THE W. W. DEFOREST SCHOLARSHIP, being the income of a fund of two thousand dollars, bequeathed in 1867 by William Wheeler DeForest, of New York City, is awarded to a student in each Senior Class who has attained distinction in the study of French while in College, provided he pursue for the year after graduation a further course of study in the modern languages, especially French, Spanish, Portuguese, or Italian, under the direction of the Faculty.

PREMIUMS

THE DEFOREST PRIZE, founded by David C. DeForest, of New Haven, and consisting of a gold medal, of the value of \$100, is awarded "to that scholar of the Senior Class who shall write and pronounce an English Oration in the best manner," the President and Professors being judges.

TOWNSEND PREMIUMS, five in number, of twelve dollars each, founded in 1843 by the gift of Isaac H. Townsend (Yale College 1822), of New Haven, are awarded in each Senior Class for the best specimens of English Composition.

SENIOR MATHEMATICAL PRIZES, the income of a fund of \$5000, established by Dr. John DeForest (Yale College 1826) and his son, E. L. DeForest (Yale College 1854), are offered to the Senior Class for the best solutions of problems in both pure and applied mathematics.

COLLEGE PREMIUMS are annually offered to the Senior Class for the solution of problems in Practical Astronomy.

WINTHROP PRIZES, the income of a fund of \$5000 given in 1871 by Buchanan Winthrop (Yale College 1862), of New York City, are annually offered to the Junior Class "for the most thorough acquaintance with the Greek and Latin poets," particular attention being paid to elegance of scholarship and appreciation of the spirit of the poetry, as shown at an examination during the latter half of the second term. The first prize is two hundred dollars, and the second prize is the balance of the income for the year.

A COLLEGE PRIZE of thirty dollars is awarded to the successful competitor at the Junior Exhibition, in the second term of each year. The competition is limited to eight speakers chosen from the higher grades of the Junior appointment list.

COLLEGE PREMIUMS are given each year in the Sophomore Class for English Composition, and for Declamation, and in the Sophomore and Freshman Classes for the solution of mathematical problems.

THE SCOTT PRIZE for excellence in German is offered to the Senior Class, and the SCOTT PRIZE for excellence in

French to the Junior Class ; these are of the value of thirty dollars each, and are given in books, appropriately inscribed. The prizes were founded by the bequest of Henry W. Scott (Yale College 1863), who died in 1871.

BERKELEY PREMIUMS for excellence in Latin Composition are offered to the Freshman Class near the end of the year, whenever there may be any surplus income from the Berkeley Scholarship Fund.

THE HUGH CHAMBERLAIN GREEK PRIZE, being the income of one thousand dollars given for this purpose in June, 1886, by the Hon. Daniel H. Chamberlain (Yale College 1862), of New York City, will be awarded annually to that member of the Freshman Class who has passed the best examination in the Greek required for admission to College.

DEGREES

The degree of BACHELOR OF ARTS is conferred by the Corporation on those persons who have completed the course of academical exercises, as appointed by law, and have been approved on examination at the end of the course as candidates for the same. Candidates are required to pay their dues to the Treasurer as early as the Saturday before Commencement. For the degrees of Master of Arts and Doctor of Philosophy, see pages 95 and 96.

SHEFFIELD SCIENTIFIC SCHOOL

GOVERNING BOARD

Rev. TIMOTHY DWIGHT, *President*
GEORGE J. BRUSH, *Director, and Professor of Mineralogy*
REV. CHESTER S. LYMAN, *Professor of Astronomy*
WILLIAM D. WHITNEY, *Professor of Linguistics*
SAMUEL W. JOHNSON, *Professor of Theoretical and Agricultural Chemistry*
WILLIAM H. BREWER, *Professor of Agriculture*
JOHN E. CLARK, *Professor of Mathematics*
DANIEL C. EATON, *Professor of Botany*
CHARLES B. RICHARDS, *Professor of Mechanical and Dynamical Engineering*
THOMAS R. LOUNSBURY, *Professor of English*
OSCAR D. ALLEN, *Professor of Analytical Chemistry and Metallurgy*
ADDISON E. VERRILL, *Professor of Zoology, and Instructor in Geology*
SIDNEY I. SMITH, *Professor of Comparative Anatomy*
WILLIAM G. MIXTER, *Professor of Chemistry*
A. JAY DUBOIS, *Professor of Civil Engineering*
CHARLES S. HASTINGS, *Professor of Physics*
HENRY W. FARNAM, *Professor of Political Economy*
RUSSELL H. CHITTENDEN, *Professor of Physiological Chemistry*

ADDITIONAL INSTRUCTORS

ALBERT S. WHEELER, *Instructor in German*
WILLIAM I. KNAPP, *Professor of French*
MARK BAILEY, *Instructor in Elocution*
JOHN H. NIEMEYER, *Professor of Drawing*
FREDERIC R. HONEY, *Instructor in Descriptive Geometry and Projection Drawing*
THOMAS W. MATHER, *Instructor in Mechanical Engineering*
SAMUEL L. PENFIELD, *Instructor in Mineralogy*
ALTON W. LEIGHTON, *Assistant in Drawing*
HORACE L. WELLS, *Instructor in Analytical Chemistry*
SAMUEL E. BARNEY, *Instructor in Mathematics and Civil Engineering*
LOUIS V. PIRSSON, *Assistant in Analytical Chemistry*
WILLIAM PRICE, *Tutor in French*

THE SHEFFIELD SCIENTIFIC SCHOOL is devoted to instruction and researches in the mathematical, physical, and natural sciences, with reference to the promotion and diffusion of science, and also to the preparation of young men for such pursuits as require special proficiency in these departments of learning. Instruction is also given in French, German, English, History, Political Economy, and Constitutional Law.

The school, begun in 1847, and reorganized upon a more extensive scale in 1860, received in 1863, by the act of the Connecticut Legislature, the national grant for the promotion of scientific education under the Congressional enactment of July, 1862.

The name was conferred upon it by the Corporation of the University as a recognition of the late Joseph E. Sheffield, Esq., whose gifts to it at various times constitute its chief property and endowment.

OFFICERS AND INSTRUCTORS—Upon the Governing Board, consisting of the professors permanently attached to the School, devolve its internal management and the greater part of the instruction. In addition to these and the instructors employed during the current year, Professor Niemeyer, of the Yale School of the Fine Arts, gives instruction in Elementary and Free-hand Drawing.

THE BOARD OF STATE VISITORS consists of the Governor, the Lieutenant Governor, three Senior Senators, and the Secretary of the Board of Education.

The instruction is intended for two classes of students :—

I.—Graduates of this and other Colleges or Universities, and other persons qualified for advanced or special study.

II.—Undergraduates who desire a training, chiefly mathematical and scientific, in part linguistic and literary, for higher scientific studies, or for other occupations to which such training is suited.

INSTRUCTION FOR GRADUATE AND SPECIAL STUDENTS

Persons who have gone through undergraduate courses of study, here or elsewhere, may avail themselves of the

facilities of the School for more special professional training in the physical sciences and their applications, gaining in one, two, or three years the degree of BACHELOR OF PHILOSOPHY, or in two additional years of Engineering study, that of CIVIL ENGINEER or that of DYNAMIC or MECHANICAL ENGINEER.

Or, engaging in studies of a less exclusively technical character, they may become candidates for the degree of DOCTOR OF PHILOSOPHY, under the conditions stated on page 96. The instruction in such cases will be adapted to the particular needs and capacities of each student, and may be combined with that given by instructors in other departments.

SPECIAL STUDENTS—For the benefit of those who, being fully qualified, desire to pursue particular studies without reference to obtaining a degree, special or irregular students are received in most of the departments of the School; not, however, in the Select Course, nor in the Freshman Class. It should be distinctly understood that these opportunities are not offered to persons who are incompetent to go on with regular courses, but are designed to aid those who have received a sufficient preliminary education elsewhere to increase their proficiency in special branches.

INSTRUCTION FOR UNDERGRADUATE STUDENTS

TERMS OF ADMISSION—Candidates must be not less than fifteen years of age, and must bring satisfactory testimonials of moral character from their former instructors or other responsible persons.

For admission to the Freshman Class the student must pass a thorough examination in the following subjects :

English—including grammar, spelling, and composition. In grammar, Whitney's Essentials of English Grammar, or an equivalent.

History of the United States.

Geography.

Latin—(1) Simple exercises in translating English into Latin. (Smith's "*Principia Latina*," Part i, is named as indicating the nature and extent of this requirement, and an acquaintance with it will be required

unless a satisfactory substitute is offered.) (2) Cæsar—six books of the Gallic War, or their equivalent. (As advantageous substitutes for the last three books of Caesar may be suggested three books of Vergil's Aeneid, or a similar amount of Ovid.)

Arithmetic—Fundamental Operations, Least Common Multiple, Greatest Common Divisor, Common and Decimal Fractions, Denominate Numbers, including the Metric System of Weights and Measures; Percentages, including Interest, Discount, and Commission; Proportion, Extraction of the Square and Cube Roots.

Algebra—Fundamental Operations, Fractions, Equations of the First Degree, with one or several unknown quantities; Inequalities, Ratio and Proportion, Powers and Roots, including the theory of Exponents, the Binomial Formula for an Entire Exponent, and the Transformation and Reduction of Radicals; Equations of the Second Degree, Progressions, Continued Fractions, Permutations and Combinations, the Doctrine of Limits, the Nature of Series, the Method of Indeterminate Coefficients, Fundamental Properties of Logarithms, Compound Interest and Annuities.

Geometry—Plane, Solid, and Spherical; including fundamental notions of Symmetry, and examples of Loci and Maxima and Minima of Plane Figures,—so much, for example, as is contained in Newcomb's Geometry, exclusive of the chapters on the Ellipse, Hyperbola, and Parabola.

Trigonometry—including the Analytical Theory of the Trigonometrical Functions, and the usual formulæ; the Construction and Use of Trigonometrical Tables; and the Solution of Plane Triangles;—so much, for example, as is contained in the first six chapters of Newcomb's larger Trigonometry and Arts. 75-78 of the Eighth Chapter, with the explanation of the first five tables in Newcomb's Five-figure Logarithmic and Trigonometric Tables, which are furnished at the examinations in New Haven.

While no entrance examination is held in the *History of England*, candidates for admission are urgently advised to make themselves as familiar as possible with that subject, as a knowledge of it is essential to the most successful prosecution of some of the studies of the course.

Candidates will be allowed the option of passing on the above-named subjects in two successive years. In such cases they must present themselves for examination at the June examination of the first year in the following subjects or parts of subjects: *History of the United States, Geography, Arithmetic, Plane Geometry, and Algebra to Quadratic Equations.*

In order to have this preliminary examination counted, candidates must pass satisfactorily on four of the subjects;

and notice of the intention to divide the examination must be given to Professor George J. Brush, Director of the School, on or before June 15.

In his preparation in *GEOMETRY* the candidate should, as far as practicable, have suitable exercises in proving simple theorems and solving simple problems for himself. It is important, too, that he should be accustomed to the numerical application of geometric principles, and especially to the prompt recollection and use of the elementary formulæ of mensuration. In *TRIGONOMETRY* he should be exercised in applying the usual formulæ to a variety of simple reductions and transformations, including the solution of trigonometrical equations. Readiness and accuracy in trigonometrical calculations are also of prime importance to the candidate. If the use of logarithms is postponed in his preparation till Trigonometry is taken up (which is by no means necessary or advisable), he should then have abundant applications of them to all forms of calculation occurring in ordinary practice, as well as to those appearing in the solution of triangles. Finally, in all his calculations, he should study the art of neat and orderly arrangement.

In *LATIN* the student should have such continued training in parsing as shall make him thoroughly familiar with declensions and conjugations, and with the leading principles of syntax. To secure these results more effectually, the requirement has been adopted of simple exercises in translating English into Latin. As this course of exercises is designed solely as a preparation for reading, it should be begun at the earliest stage of Latin study. A very large proportion of the deficiencies in the Latin examination for several years past has been due to the neglect of the suggestions of this paragraph, and to the attempt to read a Latin author with totally inadequate grammatical preparation.

The examinations for admission in 1887 take place at North Sheffield Hall, on Thursday, Friday, and Saturday, June 30, July 1, 2 (beginning at 9 A. M. on Thursday); and on Tuesday and Wednesday, September 20, 21 (beginning at 9 A. M. on Tuesday).

In general, examinations for admission to the Freshman Class of the *next* year can be held only in June and September as specified; if in any case sufficient reason exists for an exception to this rule, a special fee (not exceeding fifty dollars) will be charged.

In 1887 examinations (for the Freshman Class only) will also be held in Andover, Mass., in New York City, in

Chicago, in Cincinnati, and in San Francisco (beginning on Thursday, June 30, at 9 A. M.), at places to be announced in local newspapers of the day previous. Candidates who propose to be present are requested to send their names to Professor George J. Brush, Director of the School, before June 15. A fee of five dollars will be charged for admission to the examinations outside of New Haven.

Candidates for advanced standing in the undergraduate classes are examined, in addition to their preparatory studies, in those already pursued by the class which they wish to enter. No one can be admitted as a candidate for a degree, later than at the beginning of the Senior year.

COURSES OF INSTRUCTION, occupying three years, are arranged to suit the requirements of various classes of students. The first year's work is the same for all; for the last two years the instruction is chiefly arranged in special Courses. The special Courses most distinctly marked out are the following :

- (a.) In Chemistry ;
- (b.) In Civil Engineering ;
- (c.) In Mechanical Engineering ;
- (d.) In Agriculture ;
- (e.) In Natural History ;
- (f.) In Biology preparatory to Medical Studies ;
- (g.) In studies preparatory to Mining and Metallurgy ;
- (h.) In select studies preparatory to other higher studies.

The arrangement of studies is indicated in the annexed scheme. A fuller statement of the methods and character of the instruction will be found below, p. 78. The number of hours given means, unless otherwise specified, hours per week.

FRESHMAN YEAR: INTRODUCTORY TO ALL THE COURSES

FIRST TERM :—*German*—Whitney's Grammar and Reader, 3 hrs. *English*—Lounsbury's History of the English Language, 1 hr.; Exercises in composition. *Mathematics*—The Derivatives of Algebraic Functions; Fundamental Properties of Equations; Plane Analytical Geometry; 3 hrs. *Physics*—Recitations, 2 hrs., with experimental lectures, 2 hrs. *Chemistry*—Recitations, 2 hrs.; laboratory practice, 2 hrs. *Elementary Drawing*—Practical Lessons in the Art School, 3 hrs.

SECOND TERM :—*Language, Physics, and Chemistry*—as stated above. *Mathematics*—Plane Analytical Geometry, continued; Spherical Trigonometry (Newcomb's); 3 hrs. *Physical Geography*—8 Lectures during the term. *Botany*—Gray's Lessons, 3 hours. *Drawing*—Principles of Orthographic Projection; Isometric Drawing with application to drawing from models and structures, and isometric construction of objects from their orthographic projections; Projections of Shadows; Shading and tinting; Sections; Developments and Intersections of Surfaces; 4 hrs.

For the Junior and Senior years the students select for themselves one of the following Courses:

(a.) IN CHEMISTRY:

JUNIOR YEAR:

FIRST TERM :—*Organic Chemistry*—Lectures and Recitations, 2 hrs. *Qualitative Analysis*—Recitations, 2 hrs.; Laboratory Practice, 20 hrs.; Blowpipe Practice and Determinative Mineralogy, 3 hrs. *German*—3 hrs. *French*—3 hrs.

SECOND TERM :—*Organic Chemistry*—Lectures and Recitations, 2 hrs. *Qualitative Analysis*—Laboratory Practice, 20 hrs.; Recitations, 2 hrs. *Mineralogy*—Blowpipe Analysis and determination of species, 3 hrs.; Lectures in Crystallography and Descriptive Mineralogy, 2 hrs. *French*—3 hrs. *German*—3 hrs.

SENIOR YEAR:

FIRST TERM :—*Theoretical Chemistry*—Recitations and Lectures, 2 hrs. *Agricultural Chemistry*—Recitations (optional). *Quantitative Analysis*—continued six weeks, 20 hrs. *Organic Chemistry*—Experimental work during the remainder of the term, 20 hrs. *Geology*—Dana's; Recitations, 3 hrs. *Zoology*—Lectures, 2 hrs. *French*—3 hrs.

SECOND TERM :—*Theoretical Chemistry*—continued, 2 hrs. *Zoology*—continued, 2 hrs. *Analytical Chemistry*—Analysis of Minerals and Technical Products, 20 hrs. *Assaying*—(optional). *Metallurgy*—Lectures, (optional). *Geology*—Dana's, 3 hrs. *Mineralogy*—(optional). *French*—3 hrs., during Winter half-term.

The Laboratory Practice of the second term of the Senior Year may be devoted to such special branches of Analytical or Organic Chemistry as the student may desire, or to original investigations in connection with theses.

(b.) IN CIVIL ENGINEERING:

JUNIOR YEAR:

FIRST TERM:—*Mathematics*—Analytical Geometry of Three Dimensions; Elements of the Theory of Functions; Differential Calculus, with applications to Geometry and Analysis; solution of Numerical Equations; 6 hrs. *Surveying*—Field work, 16 hrs. till November. *Drawing*—Descriptive Geometry, 6 hrs. from November. *German*—3 hrs. *French*—3 hrs.

SECOND TERM:—*Mathematics*—Integral Calculus with applications to Geometry; Rational Mechanics; 6 hrs. *Drawing*—Descriptive Geometry, concluded; Topographical; Practice in working drawings; 6 hrs. *Surveying*—Topographical and Rail Road curves, 16 hrs. *German*—3 hrs. *French*—3 hrs.

SENIOR YEAR:

FIRST TERM:—*Field Engineering*—Location of line of Railroad, setting out, slope stakes, calculation of earth work; Lectures on economic location; Office work; Henck's Field Book; 20 hrs. till November. *Civil Engineering*—Mechanics applied to Engineering; Resistance of Materials; Bridges and Roofs; Stone Cutting with Graphical Problems; 8 hrs. *Geology*—Dana's, 3 hrs. *Mineralogy*—Blowpipe Analysis and Determinative Mineralogy, 3 hrs. *French*—3 hrs.

SECOND TERM:—*Civil Engineering*—Bridges and Roofs; Building Materials; Stability of Arches and Walls; Foundations; 6 hrs. *Dynamics*—Principles of Mechanism; Thermodynamics; Steam Engine; 6 hrs. *Hydraulics*—Hydraulics and Hydraulic Motors, 3 hrs. *Drawing*—Designing; Practical Problems; Specifications and Estimates; 12 hrs. *Astronomy*—Practical Astronomy, with field work, 6 hrs. *Mineralogy*—continued during Winter half-term, 3 hrs. *Geology*—3 hrs. *French*—3 hrs. during Winter half-term.

(c.) IN MECHANICAL ENGINEERING:

JUNIOR YEAR:

FIRST TERM:—*Mathematics*—Analytical Geometry of Three Dimensions; Elements of the Theory of Functions; Differential Calculus, with applications to Geometry and Analysis; Solution of Numerical Equations; 6 hrs. *Surveying*—Theory and Practice; 3 hrs. until November 1st. *Principles of Mechanism*—Kinematics; 1 hr. *Shop Visiting*—Study of Machine Details and Tools; 3 hrs., beginning when Surveying ends. *Drawing*—Descriptive Geometry, 3 hrs. *German*—3 hrs. *French*—3 hrs.

SECOND TERM:—*Mathematics*—Integral Calculus, with applications to Geometry; Rational Mechanics; 6 hrs. *Principles of Mechanism*—Applied Kinematics; Forms of Teeth of Wheels; Cams; Parallel Motions; Transmission of Power by Belts and Gearing, etc.; 1 hr. until Spring recess, then 2 hrs. *Shop Visiting*—Continued, 3 hrs., until Spring recess. *Study of the Steam Engine*—2 hrs. after Spring recess. *Drawing*—Perspective and Shadows; Machine Elements; 3 hrs. *German*—3 hrs. *French*—3 hrs.

SENIOR YEAR:

FIRST TERM:—*Applied Mechanics*—Friction; Moment of Inertia; Centrifugal Force; Elasticity and Strength of Materials; Theory of Flexure and Torsion; Strains in Structures; Construction of Roofs and Bridges; Equilibrium and Pressure of Fluids; Theory of Flotation; Flow of Fluids in Pipes and Channels; Resistance of Ships; 9 hrs. *Machine Designing*—Practical Exercises in Designing Machine Details and Simple Machines, 12 hrs. *Study of the Steam Engine*—continued, 2 hrs. *Visits of Inspection*—Examination of Machinery in operation; Reports of Visits. *French*—3 hrs.

SECOND TERM:—*Applied Mechanics*—continued; Hydrodynamics; Theory of Water-Wheels and Turbines; 6 hrs. *Thermodynamics*—3 hrs. *Study of the Steam Boiler*—2 hrs. *Machine Designing*—continued; Advanced Exercises in Preparing Designs and Working Drawings for Machinery; Estimates of Weight and Cost of Machinery; 12 hrs. *French*—3 hrs., during Winter half-term. *Thesis. Visits of Inspection and Reports.*

(d.) IN AGRICULTURE:

JUNIOR YEAR:

The course is identical with that in Chemistry, except that in the Spring half-term Botany is substituted for Mineralogy.

SENIOR YEAR:

FIRST TERM:—*Agriculture*—Recitations, 2 hrs. *Agricultural Chemistry*—Recitations, 2 hrs. *Geology*—Recitations, 3 hrs. *Zoology*—Lectures, 2 hrs. *Meteorology*—Lectures, 2 hrs. *Botany*—Laboratory Practice, 5 hrs. *English*—Recitations, 2 hrs. *French*—Recitations, 3 hrs.

SECOND TERM:—*Agriculture*—Recitations or Lectures, 2 hrs. *Agricultural Chemistry*—Recitations, 2 hrs. *Physiology*—Recitations or Lectures, 2 hrs. *Geology*—Recitations, 3 hrs. *Zoology*—continued, 2 hrs. *English*—Recitations, 3 hrs. *Heredity and Stock-Breeding*—Lectures, 2 hrs. during Winter half-term. *Sanitary Science and Public Health*—Lectures, 2 hrs. during Spring half-term. *French*—3 hrs. during Winter half-term.

(e.) IN NATURAL HISTORY:

Either Mineralogy, Zoology, or Botany, may be made the principal laboratory study, some attention in each case being directed to the other branches of Natural History.

JUNIOR YEAR:

FIRST TERM:—*Organic Chemistry*—Lectures and Recitations. *Qualitative Analysis*—Fresenius's; Laboratory Practice; Recitations. *Mineralogy*—Blowpipe Analysis and Determinative Mineralogy, 3 hrs. *Botany*—Gray's Manual, 3 hrs.; Laboratory Practice, 3 hrs. *German*—3 hrs. *French*—3 hrs.

SECOND TERM:—*Zoology*—Laboratory Practice, 6 to 12 hrs.; Recitations; Excursions (land and marine). *Botany*—Lectures; Laboratory Practice in the identification of Phaenogamous Plants, 2 hrs. *Physiology*—Huxley's. *Embryology*—Lectures. *Mineralogy*—Blowpipe Analysis and Determinative Mineralogy, 3 hrs. Lectures in Crystallography and Descriptive Mineralogy, 2 hrs. *Physical Geography*. *German*—3 hrs. *French*—3 hrs.

SENIOR YEAR:

FIRST TERM:—*Geology*—Dana's, 3 hrs.; Excursions. *Zoology*—Laboratory Practice, 8 to 12 hrs.; Lectures, 2 hrs.; Recitations, 2 hrs.; Excursions. *Botany*—Laboratory Practice in the Preparation and Examination of Microscopical Specimens, illustrative of Stem-structure and of the Anatomy of the higher Cryptogamous Plants, 5 hrs.; Excursions. *Meteorology*—Lectures, 2 hrs. *French*—3 hrs.

SECOND TERM:—*Geology*—Dana's, 3 hrs. *Anatomy of Vertebrates*—Huxley's, 2 hrs. *Zoology*—Laboratory Practice, 8 to 12 hrs.; Recitations, 2 hrs.; Lectures, 2 hrs. *Botany*—Herbarium Studies, especially in the Cryptogamous Orders; Botanical Literature; Essays in Descriptive Botany. *Sanitary Science, Laws of Heredity, and Principles of Breeding*—Lectures. *French*—3 hrs. during Winter half-term.

Besides the regular courses of recitations and lectures on structural and systematic Zoology and Botany, and on special subjects, students are taught in the laboratories to prepare, arrange, and identify collections, to make dissections, to pursue investigations, and when sufficiently advanced, to describe genera and species in the language of science. For these purposes, large collections in Zoology belonging to the College are available, as are also the private botanical collections of Professor Eaton.

(f.) IN BIOLOGY PREPARATORY TO MEDICAL STUDIES:

JUNIOR YEAR:

FIRST TERM :—*Organic Chemistry*—Lectures and Recitations, 2 hrs. *Qualitative Analysis*—Fresenius's; Laboratory Practice, 20 hrs.; Recitations, 2 hrs. *Mineralogy*—Blowpipe Analysis and Determinative Mineralogy, 3 hrs. *German*—3 hrs. *French*—3 hrs.

SECOND TERM :—*Anatomy and Histology*—Laboratory Practice, 15 hrs.; Lectures and Recitations, 1 hr. *Physiology*—Huxley's; Recitations, 2 hrs. *Embryology*—8 Lectures during the term. *Organic Chemistry*—continued, 2 hrs. *Mineralogy*—continued through Winter half-term, 3 hrs. *Botany*—Lectures; Laboratory Practice in the identification of Phænogamous plants, 5 hrs. during Spring half-term; Excursions. *German*—3 hrs. *French*—3 hrs.

SENIOR YEAR:

FIRST TERM :—*Physiological Chemistry*—Recitations and Lectures, 3 hrs.; Laboratory Practice, 13 hrs. *Theoretical Chemistry*—Lectures and Recitations, 2 hrs. *Zoology*—Lectures, 2 hrs. *Botany*—Laboratory Practice in the preparation and examination of microscopical specimens, illustrative of stem-structure, and of the anatomy of the higher cryptogamous plants, 5 hrs. *Geology*—Dana's, 3 hrs. *French*—3 hrs.

SECOND TERM :—*Physiological Chemistry and Experimental Toxicology*—Illustrative Lectures, Recitations, and Laboratory Practice, 27 hrs. *Geology*—Dana's, 3 hrs. *Zoology*—continued, 2 hrs. *Sanitary Science*—Lectures, 2 hrs. during Spring half-term. *Laws of Heredity and Principles of Breeding*—Lectures, 2 hrs. during Winter half-term. *French*—3 hrs. during Winter half-term.

(g.) IN STUDIES PREPARATORY TO MINING AND METALLURGY:

Young men desiring to become Mining Engineers can pursue the regular Course in Civil or Mechanical Engineering, and at its close can spend a fourth year in the study of Metallurgical Chemistry, Mineralogy, etc.

(h.) IN THE SELECT STUDIES PREPARATORY TO OTHER HIGHER STUDIES:

JUNIOR YEAR:

FIRST TERM :—*Mineralogy*—Blowpipe Analysis and Determinative Mineralogy, 2 and 3 hrs. *Astronomy*—Recitations, 4 hrs. *English*—Early English, 2 hrs. *History*—Green's Short History of the English People, 2 hrs. *French*—3 hrs. *German*—3 hrs.

SECOND TERM :—*Mineralogy*—Lectures ; Laboratory work, 3 hrs. during Winter half-term. *Astronomy*—4 hrs. *Botany*—Lectures ; Laboratory Practice in the identification of Phænogamous Plants, 2 hrs. during Spring half-term. *Physical Geography*—4 hrs. during Winter half-term ; Recitations from Guyot and Lectures. *English*—Chaucer, Bacon, Shakspeare, 2 hrs. during Winter half-term, 3 hrs. during Spring half-term. *History*—Green's History, continued, 2 hrs. during Winter half-term, 4 hrs. during Spring half-term. *German*—3 hrs. *French*—3 hrs.

SENIOR YEAR :

FIRST TERM :—*Geology*—Recitations, 3 hrs. ; Excursions. *Zoology*—Lectures, 2 hrs. *Linguistics*—Whitney's Life and Growth of Language, 2 hrs. *English*—Shakspeare, 2 hrs. *Meteorology*—Lectures, 2 hrs. *Political Economy*—Mill's Principles, 4 hrs. *French*—3 hrs.

SECOND TERM :—*Geology*—continued, 3 hrs. *Zoology*—continued, 2 hrs., during Winter half-term. *Meteorology*—Lectures, 2 hrs. during Winter half-term. *Sanitary Science*—Lectures, 2 hrs. during Winter half-term. *Political Economy*—Mill, continued ; Exercises ; 3 hrs. during Winter half-term. *Constitutional Law*—6 hrs. during Spring half-term. *English*—Shakspeare, Milton, Dryden, Pope, Gray, and later authors, 3 hrs. *French*—3 hrs., during Winter half-term.

Exercises in English Composition are required during the entire course from all the students. The preparation of graduating theses is among the duties of the Senior year.

Lectures on Military Science and Tactics are annually given by officers of the United States Army.

The following account of the various subjects specified in the above scheme will explain the character and aim of the instruction.

ELEMENTARY CHEMISTRY.—The exercises in Elementary Chemistry consist in recitations from a text-book and experiments by the students in the laboratory to illustrate statements in the book. The object of the laboratory work is to facilitate the study of the subject, to train the students in manipulation and in the observation of chemical phenomena. Notes are required and students are questioned on the experiments. As the class is divided according to scholarship in Chemistry and Physics, opportunity is given to those who are most proficient to make rapid progress.

ANALYTICAL CHEMISTRY.—*Qualitative and Quantitative.*—This study is intended to serve two purposes. Analytical Chemistry is used by the advanced student as a means of investigation in scientific or technical researches. The beginner, however, derives from its study, advantages of another kind. The knowledge of the properties of chemical compounds, and familiarity with chemical reactions gained by experience in the laboratory, and the development of the reasoning faculties by the application of this knowledge in analytical processes, enables the student to generalize and classify chemical phenomena and aids him to understand the more abstract theories of chemical philosophy. The method of instruction adopted is conformed to this view of the uses of the study. Text-books are used and recitations are required, but the more important part of both study and instruction is performed in the laboratory. In order to solve the problems which are there constantly presented, the student, aided by books and instructors, must learn both principles and their applications. The student throughout his course in Analytical Chemistry, spends four consecutive hours in laboratory work during five days of the week. The laboratory, however, is kept open seven hours daily for the benefit of graduate students and others who desire to devote more time to this study.

Qualitative Analysis forms a part of the courses in Chemistry, Biology, Agriculture, and Natural History. Quantitative Analysis is one of the more important studies of the Senior year in the Chemical Course. It is also included to some extent in the Agricultural Course.

ORGANIC CHEMISTRY is taught by informal lectures and experimental illustrations as well as by text-book drill, a lesson from Richter's Organic Chemistry being given out for each instruction-hour. The class has two exercises weekly throughout the year. The course is adapted to give a fairly complete outline of the subject and some familiarity with the more important bodies and classes of bodies.

In addition to this, the Senior students in the Chemical Course are required to spend 20 hours per week during the latter half of the first term in experimental work in Organic Chemistry. This is intended to supplement the preceding course and at the same time to serve as a preliminary training for such students as desire to make a special study of Organic Chemistry.

Opportunity is also afforded for the carrying on of original investigations in this subject, either in connection with theses or as a part of the regular work in the case of advanced students.

PHYSIOLOGICAL CHEMISTRY and EXPERIMENTAL TOXICOLOGY.—Physiological Chemistry is taught by laboratory exercises, illustrative lectures and recitations. Each student is provided with a suitable working place in the laboratory, well equipped with all needed apparatus and material. The regular course of work, designed especially for Senior

students in the Biological Course, extends throughout one year and embraces a thorough study of the chemical composition of the various tissues and fluids of the body, together with a study of the chemical and physiological processes of respiration, digestion, secretion, excretion, and nutrition in general.

Beginning with a study of the albuminous bodies, the experimental work extends through the epithelial, connective, contractile, and nerve tissues. Proceeding then to digestion, the various digestive fluids are studied, artificial digestions are made, and the several products of digestive action isolated and studied. The blood and urine are next considered, and students are taught to make both qualitative and quantitative analyses of the latter and to identify abnormal constituents. A portion of one term is also devoted to a study of the chemical reactions of the more important mineral and organic poisons, and their physiological action determined experimentally. Students are also taught how to separate poisons from organic tissues and fluids, and to identify them both by chemical and physiological reaction. During the latter half of the second term, Senior year, opportunity is afforded for the carrying on of original investigations on some selected subject in either physiological chemistry or toxicology, in connection with the preparation of graduating theses. The course of work is particularly recommended to students intending to enter upon a course of medical studies.

ANATOMY AND ELEMENTARY PHYSIOLOGY.—The object sought in the instruction in Anatomy and Physiology, as taught during Junior year, is the manual and mental training of the student in the methods of investigation by which the facts and principles of these sciences have been established, and at the same time to give him a sufficient knowledge of their elements to enable him to pursue with profit the special studies of the Biological Course as a preparation for medical studies. With this end in view, four forenoons each week are given to laboratory work in Anatomy and Histology. The student, under the immediate supervision of the instructor, dissects specimens of a number of different animals, and is required to make careful sketches and records of his work; he also examines the different animal tissues with the microscope, makes microscopical preparations, and is taught the methods of anatomical and histological investigation. This work is reviewed each week by means of text-book and recitation or lecture and examination. The elements of Human Physiology are taught by text-book, recitations, and demonstrations. The physiology of digestion and nutrition is taught during Senior year in connection with Physiological Chemistry. During the last part of the term there is a short course of lectures on Embryology with special reference to Human Morphology.

GEOLOGY.—The course in Geology includes recitations and oral instruction extending through the entire year on alternate mornings. During the first half-year, the recitations are attended by the entire Senior Class, except those in the course in Mechanical Engineering. This part of the course includes Physical, Lithological, and Dynamical Geology. These subjects are illustrated by diagrams and specimens. During the first term each student is required to make a collection containing a specified number of the most important rocks and minerals, and to pass a thorough examination upon them at the end of the first term; the object is to compel every student to become personally familiar with the appearance as well as with the composition and other characters of the rocks and minerals that are of most importance in Geology, as well as in the arts.

The last half of the year is devoted to Historical Geology and Palæontology. This part of the course is pursued by all the Seniors except those in the courses in Mechanical and Civil Engineering. Suitable collections of fossils are used to illustrate the subject.

Opportunities are afforded for optional geological excursions during the warmer months.

MINERALOGY.—The instruction in Mineralogy is carried on by means of practical work in a laboratory especially fitted up for the purpose, and is intended to familiarize the student with the common minerals, attention being devoted especially to those which are of economic, geological, or scientific importance. To understand better the chemistry of the subject, the student is first made familiar with the simple chemical and blow-pipe reactions useful in testing minerals, and later applies this knowledge to the determination of unknown species. The students have access to a labeled collection where they can study the properties of the minerals and make comparisons, and also to extensive unlabeled collections, especially arranged to give them practice and facility in the correct identification of minerals. In addition to the laboratory work, instruction is given in Crystallography, illustrated by a collection of models and natural crystals. The lectures in Descriptive Mineralogy to the more advanced students are illustrated by means of the extensive private collection of Professor Brush. The laboratory is provided with apparatus for the thorough chemical or physical investigation of minerals and with an extensive library to which the students have access. The laboratory is open seven hours each day to accommodate any who desire to devote more time and attention to the subject than is laid out in any of the prescribed courses.

ZOOLOGY.—The instruction in Zoology includes a course of lectures on Systematic Zoology, Morphology, and Embryology, which are attended by all the Seniors except those in the courses in Mechanical and Civil Engineering. These lectures are generally given twice a week,

and continue during about half the year. The students are required to keep careful notes of the lectures.

Students in the Natural History Course are also required to pursue a course of laboratory instruction during the second term of the Junior and all of the Senior year. This generally occupies two to four hours a day on four days of each week. It includes dissections of various classes and orders of animals, with microscopic studies of the finer structures and of minute animal forms, as well as work in Systematic Zoology.

Special courses of recitations or lectures on particular subjects are also given when desirable.

BOTANY.—The scheme of instruction provides for three successive courses of study, as either ending the study for the ordinary student, or introducing it for one who desires to become a professional botanist.

The first or elementary course, which is required of all the Freshmen, is designed to teach the nature of the visible organs of flowering plants, tracing the life-history of vegetation from seed, through stem and root, leaves, branches, buds, blossoms and fruit, to seed again. The method consists mainly in the use of some easy text-book, like Gray's *Lessons*, with whatever illustrations and explanations may be needed to secure the student's attention. The second course, coming the next year, is restricted to the sections in Biology, Natural History, Agriculture, and Selected studies, and is intended to enable the student to recognize the chief natural orders of native plants, with the ability to identify the common species. The class meets two or three times a week in spring and summer, and is practiced in identifying plants, using Gray's *Manual* as a standard, and employing the ordinary simple dissecting microscope. At this point the instruction for the Select Course ceases; in the next fall term the work for the Courses in Biology, Natural History, and Agriculture is entirely practical, books being used only for reference. Students begin with cutting thin sections of some common woody and herbaceous stems, and are shown how to prepare such sections for examination and for permanent preservation as microscopic objects. After acquiring some facility in microscopical manipulation, various parts of flowering plants are brought in for dissection and examination, and towards the close of the term some attention is given to Ferns, Mosses, and Algæ. This finishes the course for ordinary students; for those who may desire to prosecute the science professionally, the work is arranged to suit individual requirement, whether it be in the direction of Histology, or of Systematic Botany as applied to flowering plants, or to Ferns, Mosses, Hepatics, or Algæ.

AGRICULTURE.—The special instruction in the science of Agriculture is by recitations and lectures, with such aids and appliances as are suited to the class-room. Besides Agricultural Chemistry, it includes a discussion of the cultivation of the staple field crops of the country;

the production of live stock ; theories of rural economy and systems of husbandry ; the laws of heredity and principles of stock-breeding.

SANITARY SCIENCE.—The lectures on this subject discuss the natural laws which govern the public health ; their relation to the social habits and condition of communities ; instruction in the use of mortuary statistics ; epidemics and pestilences, with their relations to the prosperity of a community, and methods of control ; the germ theory of disease and theory of disinfectants ; the hygiene of private dwellings and public buildings ; the relations of public health to water supply and to sanitary engineering ; legislation relating to the public health, and the methods of official sanitary administration.

MATHEMATICS.—The Mathematical studies of the Freshman Year are pursued by all members of the class ; those of the Junior Year by students in the courses of Engineering and properly qualified Special Students who may choose them. During the latter year, in connection with the instruction briefly indicated in the scheme above [p. 74], a course of familiar lectures is given to supplement the ordinary classroom exercises.

PHYSICS.—The object of the experimental lectures is not only to elucidate the subjects treated in the text-book employed, but also to extend the treatment of such subjects, and to introduce others where thought desirable. A considerable portion of the work of the year is the preparation for recitation on matter thus presented.

At the end of November the Freshman class is redivided into three sections, according to capacity shown in the subjects of Chemistry and Physics. After this, although the experimental lectures will be attended as before by the class as a whole, the higher divisions will be able to pursue the studies more thoroughly.

The facilities of the Physical Laboratory will be extended to such graduate students and Seniors as may desire them.

Course in Advanced Physics.—A course of two lectures per week, beginning in January, supplemented by laboratory work. The earlier portion of the time is devoted to the theory of observation and the method of least squares. The course is optional to all who have a command of the calculus.

CIVIL ENGINEERING.—The object of this course is to give a thorough preparation, first of all, in the principles of the various sciences involved, and afterwards, as extensive practice in the application of these principles as the time at disposal, the ability of the students, and the facilities and plant permit.

Under the first head are included such subjects as Mathematics, Physics, Mechanics, Thermodynamics, Astronomy, Geology, Mineralogy, Chemistry, and Botany ; and under the second head, Drawing, Survey-

ing, Strength and Properties of Materials, and Design and Construction of various kinds, such as Bridges, Roofs, Foundations, Arches, Retaining Walls, Dams, Water Works, Rail Roads, Improvement of Rivers and Harbors, Sewerage and Drainage, Water Motors, etc.

The one division includes Civil Engineering as a Science, the other Civil Engineering as an Art. The ground covered by the first is definite, and the instruction is made as thorough as possible. The ground covered by the second is of almost indefinite extent. Here, by a careful selection of practical examples, such as occur in engineering practice, the application of principles is illustrated, and together with the analytical or algebraic methods, the student is also instructed in practical graphic solutions wherever such solutions present a special value. Much time is devoted to geodetic operations and to surveying in the field. Instruction is given in the practical operations connected with the reconnaissance, location, and surveys of roads, canals, and railroads, such as setting out, cross-sectioning, setting grade stakes, calculation of earth work, etc. Thorough instruction is given in drawing and design, the construction of working drawings and principles of designing as applied to bridges, roofs, etc.

The instruction is by means of practical exercises, lectures, and recitations, so combined as to develop so far as possible the mental powers of the student. Visits of inspection are made at suitable intervals to private and public works of engineering interest.

The entire course requires five years, three years of undergraduate and two of graduate instruction; and a Thesis of merit upon some approved subject, accompanied by designs and estimates, is required upon the completion of the course, as also at the end of the first three years. Examinations are also held at the end of every term and year.

In what follows, such details are given as may be of interest to those who contemplate taking the course.

Mathematics—6 hours weekly, Junior Year, both terms. See Synopsis of Course.

French and German—Students in this course take in the Junior Year the regular studies of the Junior Class in both German and French, 3 hours each. In the Senior Year, French is continued, 3 hours, during the Winter half-term.

Drawing and Descriptive Geometry—Drawing is begun at once in the first term of Freshman Year, under the charge of the Street Professor of Drawing in the Art School, and includes practice in free hand drawing. In the second term, under the Instructor in Instrumental Drawing, the students take isometric drawing with application to drawing from models and structures by measurement, shading, tinting, conventional use of colors, principles of orthographic projections, and practice in making simple working drawings, 3 hours both terms.

The Drawing of Junior Year, 3 hours, both terms, includes Descriptive Geometry, the drawing of structures from measurement, and elements of design for simple structures. The instruction is by recitations, lectures, practical exercises and models, and is under the charge of the Instructor in Instrumental Drawing and the Professor and Instructor in Civil Engineering. Included in the work of this year is also the mapping of surveying field notes.

In the Senior Year, the drawing consists of the mapping of the surveys of that year, and the designing of structures and finished drawings, designs and estimates, under the charge of the Professor and Instructor in Civil Engineering, 6 hours both terms.

Surveying and Field Engineering—The instruction in the field occupies about 20 hours for six or more weeks in both terms of Junior and Senior Year. The exercises at these times are so arranged as to secure as much consecutive time as possible in the field. In Junior Year the use and adjustments of the instruments are learned and practice surveys made, together with recitations and lectures upon surveying operations and methods of keeping field notes. Levels are run, surveys made, plotted and checked; blue print copies of drawings made, the use of compass, level and transit acquired. In the second term of Junior Year land and topographical surveys are made and railroad curves run.

In the first term of Senior Year a line of railroad is located and set out from a contour map previously obtained, grades and curves established and set out, and computations made. The theory of the economic location is taught by lectures and recitations in connection with the field work. The work is arranged so that each student has sufficient practice in all the various operations. The text-books used are Gillespie and Johnson's works, Henck's Field Book, Gore's Elements of Geodesy, and Merriman's Theory of Least Squares. The course is under the charge of the Professor and Instructor in Civil Engineering, aided by several assistants.

Mechanics of Engineering—Senior Year, 6 to 8 hours, both terms. The text-books of Weisbach, 1st and 2d volumes, are used in connection with lectures and solution of practical problems in illustration of the various topics. The course includes thorough instruction in the strength of materials, the stability of foundations, retaining walls, dams and embankments, and masonry arches, by lectures and graphic methods. Questions of hydraulics, water supply, and measurement of discharge, receive attention, and the theory and construction of water motors. A course in Thermodynamics with application to air and steam engine is also included.

Construction and Design—Senior Year, 6 hours both terms. A thorough course is given in the determination of stresses and the detailed design of roofs, bridges, etc., with working drawings, specifications and

estimates. Visits of inspection are made, and recitations and lectures held in connection with the work in the drawing room.

Astronomy—A course is given under the charge of the Professor in Astronomy, 6 hours, second term of Senior Year, including practical work and the use of the sextant and transit in determining time, latitude, and azimuth.

Geology—This course occupies 3 hours, up to the middle of the second term of Senior Year.

Mineralogy—This course, under the Instructor in Mineralogy, occupies 3 hours up to the middle of the second term in Senior Year.

A course of lectures on the theory of electricity and its applications, by the Professor of Physics, is open to students in this Department, and can be taken as a part of the preparation for a graduate course in the higher branches of electrical science.

MECHANICAL ENGINEERING—The objects aimed at in the plan of instruction in this course are, to give to the student a thorough training in elementary and advanced Mathematics and Physics, and their application to the Science of Construction; to make him familiar with the general principles of Engineering and with the practical details of mechanical construction through which these principles are made useful; and to enable him ultimately in beginning the work of his profession to bring to bear upon it a well balanced store of theoretical and practical knowledge, and a mind trained in correct habits of thought and work.

The complete course covers five years, three of which are spent in undergraduate study and two in a graduate course, a portion of which may be spent in actual practical work. The subjects and methods of instruction in the undergraduate course are as follows:—

Mathematics—See synopsis, page 83.

French and German—Students take in the Junior year the regular studies of the Junior Class in both French and German. In the Senior year French is continued during the Winter half-term.

Surveying—A short course in Surveying comprises lectures on methods of surveying and the construction and use of instruments, also practice in field work in the use of the level and transit, City surveying, establishing grades, and laying out buildings.

Shop Visiting divides the time equally with Drawing in the Junior year until the Spring Recess. The student, accompanied by the instructor, is employed in studying machinery in use and in process of construction in different machine shops in the city. He is required to make satisfactory, carefully dimensioned sketches, from measurements taken by himself, of the complete machines and their parts, and to describe the tools and mechanical operations used in producing the simpler pieces.

Drawing—Descriptive Geometry is taught in the drawing room by lectures and recitations, and by exercises at the drawing board where the problems are solved graphically by the student. Instruction in *drawing Machine Elements* is given in the Junior year. Models and cartoons showing examples of approved practice are used by the instructor, who also gives personal attention to each student's work at the board as it progresses.

Principles of Mechanism—This is a course in theoretical and applied Kinematics. Instruction is by text-books and lectures illustrated by diagrams and models, an extensive collection of which belongs to the School and is accessible to the student.

Steam Engine—Recitations and lectures in this subject begin in the Junior year, after the Spring Recess. They relate to the structural details of engines and to the mechanical principles involved in their working. The subject is continued in the first term of Senior year, when particular attention is directed to various kinds of valve gear, the governor, the fly-wheel, balancing, and the effect of the weight of the reciprocating parts. In the second term of Senior year, the study of *Steam Boilers* takes the place of that of Engines.

Indicator Practice—In the Senior year the student is afforded opportunities to apply the indicator to various engines in operation, and has practice in reading indicator cards and measuring them by the planimeter. He is taught to detect such defects in the engine as are shown by the cards.

Applied Mechanics—In this course lectures, recitations, and exercises in the solution of practical problems, relate to the topics specified under this head in scheme on page 75.

Thermo-dynamics—Recitations and lectures on the mechanical theory of heat and its applications to hot-air engines, gas engines, and the steam engine.

Machine Design—The course in this subject consists chiefly in practical exercises at the drawing board, and partly in lectures on the functions of machines and the mechanical principles which are applied in determining the proportions of machinery. The student, under the guidance of an experienced instructor, is employed in making complete working drawings of machines, many examples of which are in the drawing rooms and the basements of the school. He does not copy the examples, but is required to change the dimensions and in many cases to alter the design, and is ultimately taught to make partly new designs of important machinery, such as cranes, yacht engines, machine tools, boilers, etc. The discipline the student receives is such as he would obtain in the drawing office of an engineering establishment, while he is also carefully instructed in the theory of the subjects he deals with, and in the practical bearing of all his work.

In the Senior year several excursions are made by the class, accompanied by one or more instructors, to neighboring manufacturing and engineering centers, where large manufactories, pumping works, ocean steamers, etc., are visited. Full notes must be taken, and a satisfactory written report upon the machinery examined is required of the student.

Thesis.—Before graduating, the student must present a satisfactory thesis on some subject approved by the professor in charge of the department of Mechanical Engineering.

A course of lectures on the theory of Electricity and its applications is open to students in this department, and these lectures can be taken as a part of the preparation for a graduate course in the higher branches of electrical science.

ASTRONOMY.—Students in the Select Course receive instruction in Astronomy during Junior year, first term, four hours per week.

Students of Civil Engineering during the second term of their Senior year have six recitations per week, and also practical experience in the determinations of time, azimuths, latitude, and longitude, etc.

ENGLISH.—The course is designed to give the student acquaintance with the great representative writers of the various epochs. A history of the language is one of the studies of the Freshman year; and after that year the study of the language is made entirely subordinate to that of the literature. During the first term of Junior year, however, extracts from Early English authors are read, and Early English grammar studied, so as to familiarize the student with the inflections then in use, and the distinctions existing between the leading dialects. It is the aim of this term's work to give such knowledge of forms, and to some extent of words, that the student will be able to read at sight any Early English author whose writings do not involve special difficulties of language or vocabulary.

With the second term the regular study of English literature proper begins with Chaucer; and for the rest of the course till the end of Senior year the following authors are read: Bacon, Shakespere, Milton, Dryden, Pope, Gray, Goldsmith, and later writers. Those mentioned in the list are always studied, but other authors not named are also taken up, the course varying somewhat in different years. In all cases complete works of a writer are studied, not extracts; as for instance several of Chaucer's Tales, and several of the plays of Shakespere. The authors are taken up in chronological order, and the literary history of the time is likewise carried on in connection with the great representative writers of each period.

GERMAN.—The aim in this department is to give such a knowledge of facts and principles as shall qualify the student as rapidly as possible to use the language for such various purposes as his special needs may re-

quire, and particularly to facilitate the use of German treatises in his later special studies. To accomplish this, the course consists of the combination of the study of systematic German grammar with a complementary and progressive course of oral translation from English into German, the latter being designed for the double purpose of increasing the command of grammatical principles, and through the establishment of a habit of ready and accurate expression, of laying the foundation for future colloquial use of the language. In connection with the foregoing it is attempted to introduce the student to as many different styles and as many forms of composition as the time allows. For this purpose the reading matter is in general selected from readers and collections prepared for the use of schools in Germany, and characterized by the number and variety of their extracts, thus enabling the instructor to select pieces that illustrate one another and to avoid similar lines of reading with successive classes. Constant attention is paid during a portion of the course to English affinities, to analogies in the formation of English and German abstract terms, to the commoner rhetorical resemblances and differences, to the details of arrangement in German sentences, and the development of secondary from primary significations of words.

In view of the shortness of the course there is no attempt to secure any considerable acquaintance with German literature. A body of representative pieces of lyric poetry, however, is made the basis of careful literary study, with special attention to poetic diction and variety of metrical form. Memorizing German poems is practiced to some extent as a class exercise, as also retranslation of dictated literal versions of simple pieces into German verse, in accordance with prescribed rhythm and sequence of rhyme.

Occasionally, when the proficiency of a class allows it, an advanced division is organized, which is thus enabled to read a much larger amount of matter and to pursue more critical methods. The attention of such a division is sometimes given for a few months to extracts treating leading events of German history, with a collateral course of German historical poetry, the selections being made so as to be mutually illustrative. Historical poems not contained in the text-books are often furnished by dictation.

During the last few weeks of the course, there is an attempt to initiate the student into the art of rapid and intelligent, though uncritical reading, dispensing largely with dictionary and grammar and aiming to form independent habits of observation and induction. For this purpose recourse is had to entertaining novels.

In general, it is the endeavor, while aiming primarily and constantly at acquiring a working knowledge of contemporary German, to combine habitually scientific and empirical methods, to enforce correct notions as to the nature of language, to secure incidentally some of the most important disciplinary results of elementary linguistic study, and to give

some conception, by suggestive questions and occasional statements, of the various special directions which a more extended and advanced course would necessarily take.

The time allotted to the subject is three hours a week during the Freshman and Junior years. In the Senior year no instruction is given, but at the end of the year, there is a prize examination on some subject assigned some months previously. The subject for the present year is Goethe's "*Faust, Erster Theil.*"

Regular text-books: Whitney's German Grammar; Whitney's German Dictionary; Ahn's Exercises, or Eysenbach's German Exercises. Some recent text-books: Lebensbilder, III and IV; Geerling's Lesebücher, I, II, III; Wackernagel, Lesebuch, III; Daniel, Lehrbuch der Geographie, with physical, political, and historical maps; Andrä, Erzählungen aus der deutschen Geschichte; Schmid, Auswahl deutscher Gedichte; Wendt, Sammlung deutscher Gedichte.

FRENCH.—To avoid repetition, it will suffice to state that much the same course is pursued in French as above detailed for the German, and on like principles. The three weekly exercises extend through the entire Junior, and most of the Senior year, based on a systematic review of the essential elements as exhibited in Whitney's French Grammar, supplemented by Ahn for the more practical part. One of the leading objects being to further the student in the use of scientific treatises, a wide extent of reading is insisted on, beginning with the simpler novels, such as "*Le Conscri,*" "*L'Ami Fritz,*" "*La Petite Fadette,*" etc., through a scale of diversified vocabulary by which at last sight-reading of such matter as is more appropriate to the department may be profitably entertained. The practical or conversational course runs along parallel with the more systematic study of the language.

HISTORY.—The principal part of the work consists of recitations, Green's Short History of the English People being used as a text-book. The students are also required to look up special topics, and to give the results of their studies to the class; the books used for this purpose are drawn from a small historical library in the class-room. The location of places is enforced by the use of outline maps which the students are required to fill in. Particular attention is given to the history of institutions and to the constitutional and economic growth of the country.

POLITICAL ECONOMY.—In the beginning of the course an effort is made to familiarize the students with the fundamental principles of Economics and more particularly to train them in economic reasoning. More difficult problems are then taken up and discussed, and special topics are assigned to the class for investigation. A small library has been provided, which contains a number of copies of each of the principal authorities, in order that the students may be able to familiarize themselves somewhat with the literature of the subject, without expense to themselves.

THE TERMS AND VACATIONS correspond with those of the College. (See Calendar, p. 6.)

EXPENSES—The charge for tuition for undergraduate students is \$150 per year, payable \$55 at the beginning of the first and second terms, and \$40 at the middle of the second term. An additional charge of \$5 a year is made to each student for the use of the College Reading Room and Gymnasium, which is payable at the beginning of the first term, making the total charge for that term \$60. The student in the Chemical course has an additional charge of \$70 per annum for chemicals and use of apparatus. He also supplies himself at his own expense with gas, flasks, crucibles, etc., the cost of which should not exceed \$10 per term. A fee of \$5 is charged members of the Freshman Class for chemicals and materials used in their laboratory practice, and the same fee is required from all (except Chemical students) who take practical exercises in Blow-pipe Analysis and Determinative Mineralogy. A fee of \$5 a term is also charged to students in the Zoological and Anatomical Laboratories, for materials and use of instruments.

For the graduate students the charge for tuition is one hundred dollars per year.

THE FEES for graduation of BACHELOR OF PHILOSOPHY are \$10, unless the person taking the degree is also a graduate of the College, when the fee is but \$5.

SCHOLARSHIPS

STATE SCHOLARSHIPS—By an Act passed in 1863, the General Assembly of Connecticut established certain scholarships from the income of the fund derived from the National Grant of July, 1862, for the promotion of scientific education. There are now about twenty-three of these scholarships (the number depending upon the income of the fund), designed to aid by free tuition young men fitting themselves more especially for pursuits in agriculture, manufacturing, and engineering.

The applicants must be citizens of Connecticut. The appointing board consists of the Board of State Visitors (see p. 68) and the Secretary of the School; it meets on the Tuesday before Commencement (viz: on June 28, 1887), to fill the vacancies for the next University year. Applications should be made, previous to that date, to Professor George J. Brush, Secretary of the appointing Board.

THE HOLMES SCHOLARSHIP, founded by Samuel Holmes, Esq., amounts to \$60 per year. The recipients must be citizens of Middlebury, Prospect, Waterbury, or Wolcott, Connecticut; the appointments are made by the Board of Agents of the Bronson Library in Waterbury.

DEGREES

THE DEGREE OF BACHELOR OF PHILOSOPHY is conferred on those who have completed one of the three-year courses, and have passed the examination at its close.

CIVIL ENGINEER AND DYNAMIC OR MECHANICAL ENGINEER
—See page 97.

DOCTOR OF PHILOSOPHY—See page 96.

COURSES OF GRADUATE INSTRUCTION

FACULTY

REV. TIMOTHY DWIGHT, *PRESIDENT*
REV. NOAH PORTER, *Professor of Moral Philosophy and Metaphysics*
ELIAS LOOMIS, *Professor of Natural Philosophy and Astronomy*
JAMES D. DANA, *Professor of Geology and Mineralogy*
CHESTER S. LYMAN, *Professor of Astronomy*
REV. JAMES M. HOPPIN, *Professor of the History of Art*
EDWARD J. PHELPS, *Professor of Law*
WILLIAM D. WHITNEY, *Professor of Sanskrit and Comparative Philology*
HUBERT A. NEWTON, *Secretary, and Professor of Mathematics*
GEORGE J. BRUSH, *Professor of Mineralogy*
SAMUEL W. JOHNSON, *Professor of Theoretical and Analytical Chemistry*
WILLIAM H. BREWER, *Professor of Agriculture*
JOHN F. WEIR, *Professor of Painting*
JOHN E. CLARK, *Professor of Mathematics*
DANIEL C. EATON, *Professor of Botany*
ARTHUR M. WHEELER, *Professor of History*
ADDISON VAN NAME, *Instructor in Japanese*
J. WILLARD GIBBS, *Professor of Mathematical Physics*
CHARLES B. RICHARDS, *Professor of Mechanical and Dynamical Engineering*
ARTHUR W. WRIGHT, *Professor of Molecular Physics and Chemistry*
THOMAS R. LOUNSBURY, *Professor of English*
OTHNIEL C. MARSH, *Professor of Palaeontology*
WILLIAM I. KNAPP, *Professor of Modern Languages*
JOHN H. NIEMEYER, *Professor of Drawing*
FRANKLIN B. DEXTER, *Professor of American History*
OSCAR D. ALLEN, *Professor of Analytical Chemistry*
TRACY PECK, *Professor of Latin*
ADDISON E. VERRILL, *Professor of Zoology*
WILLIAM G. SUMNER, *Professor of Political and Social Science*

REV. GEORGE T. LADD, *Professor of Mental and Moral Philosophy*
SIDNEY I. SMITH, *Professor of Comparative Anatomy*
WILLIAM G. MIXTER, *Professor of Chemistry*
HENRY P. WRIGHT, *Professor of Latin*
HENRY A. BEERS, *Professor of English Literature*
A. JAY DUBOIS, *Professor of Civil Engineering*
EDWARD S. DANA, *Assistant Professor of Natural Philosophy*
THOMAS D. SEYMOUR, *Professor of Greek*
CHARLES S. HASTINGS, *Professor of Physics*
WILLIAM R. HARPER, *Professor of the Semitic Languages*
RUSSELL H. CHITTENDEN, *Professor of Physiological Chemistry*
HENRY W. FARNAM, *Professor of Political Economy*
ARTHUR T. HADLEY, *Professor of Political Science*

OTHER INSTRUCTORS

REV. GEORGE P. FISHER, *Professor of Ecclesiastical History*
WILLIAM C. ROBINSON, *Professor of Law*
ALBERT S. WHEELER, *Instructor in Roman Law*
SIMMON E. BALDWIN, *Professor of Comparative Jurisprudence*
JOHNSON T. PLATT, *Professor of General Jurisprudence*
HARRISON W. LINDSLEY, *Instructor in Architecture*
FREDERIC R. HONEY, *Instructor in Perspective*
JOHN P. C. FOSTER, M.D., *Instructor in Anatomy*
SAMUEL L. PENFIELD, *Instructor in Mineralogy*
HORACE L. WELLS, *Instructor in Analytical Chemistry*
ALFRED L. RIPLEY, *Assistant Professor of German*
EDWARD V. RAYNOLDS, *Lecturer on Constitutional Law*
HENRY C. WHITE, *Lecturer on Local Government*
EDWARD G. BOURNE, *Lecturer on Mediaeval History*

The instruction of graduates, independently of the courses of study provided in the professional schools, had been attempted in an informal way before 1847, when such courses were definitely arranged, and the Department of Philosophy and the Arts constituted, with this object in view. The degree of Doctor of Philosophy was first offered in 1860, that of Civil Engineer in 1860, that of Dynamical or Mechanical Engineer in 1873, and that of Master of Arts (previously given without evidence of study) in 1874.

Graduates of this and other Colleges or Universities, and (in exceptional cases, by special permission) other persons of liberal education, who are not less than eighteen years old, are received as students for longer or shorter periods, with or without reference to the attainment of a degree.

An Executive Committee has a general oversight of the students in this Department. The Committee this year is composed of Professors WHITNEY, NEWTON, BRUSH, and WHEELER. They receive the names of applicants for instruction, and judge and approve the courses of study proposed; and information may be obtained from them as to conditions, terms, etc. Students may also make special arrangements with any instructor according to their mutual convenience.

Instruction is given partly by lectures, partly by recitations and by oral and written discussions, partly by directing courses of reading, and partly by work in the laboratories and with instruments. There are also various voluntary associations, in which instructors and students meet together periodically for the reading of papers, oral discussions, etc.; such are, the Classical and Philological Society, the Mathematical Club, the Political Science Club, etc.

The terms and vacations correspond with those in the Undergraduate Departments. (See Calendar, p. 6.)

The fee for instruction is generally one hundred dollars; but may be more, or less, according to the course pursued and the amount of instruction received. Students have the free use of the Library of the University (including the

Linonian and Brothers Library); and are admitted to the College Reading Room on payment of an annual fee of two dollars.

THE DEGREE OF DOCTOR OF PHILOSOPHY is conferred upon those who, after having taken a Bachelor's degree (implying a course of undergraduate study equivalent to that pursued in the Academical Department), and having studied in this Department for not less than two years, shall have passed a satisfactory final examination and presented a thesis giving evidence of high attainment in the branches of knowledge pursued. It is not given, upon examination, to those whose studies are pursued elsewhere. The requirements for it will in some cases exact of the student more than two years of labor; especially when the course of undergraduate study has been less than four years. A good knowledge of Latin, German, and French, will be required in all cases, unless, for some very exceptional reason, the candidate be excused by the Faculty. The graduating fee is ten dollars.

THE DEGREE OF MASTER OF ARTS is conferred on Bachelors of Arts of Yale College or of other Colleges, of two years' standing or upwards, who have given to the Faculty of the Academical Department evidence of having made satisfactory progress in liberal studies after receiving their first degree. Such evidence may be furnished by one year's systematic study (not professional) in New Haven, under the direction of the Academical Faculty, followed by an examination. Graduates of other Colleges can obtain the degree only by residence as thus described.

Such Bachelors of Arts *of this College* as may not choose to reside at the College for the prosecution of study may show at any time, not less than three years after graduation, by their printed essays, or by submitting to special exam-

inations, that they have spent a year in liberal (and non-professional) study, and are worthy of recommendation for this degree.

A committee of the Faculty is appointed (consisting, for the present year, of Professors NEWTON and WHEELER), to whom candidates for this degree must submit their proposed courses of study by the first of November in each year; and the evidence of a year's study must be submitted to the same committee by the first of June.

In the case of resident students, the charge for instruction will usually be one hundred dollars, with a fee of ten dollars for the degree. In the case of non-residents, the fee for examinations and the degree will usually be twenty-five dollars.

THE DEGREES OF CIVIL ENGINEER AND MECHANICAL (OR DYNAMICAL) ENGINEER are conferred on Bachelors of Philosophy who have taken the first degree in Engineering study, and who pursue a higher course under the direction of the Governing Board of the Sheffield Scientific School, for at least two years, sustaining a final examination, and giving evidence of their ability to design important constructions, and to make the requisite drawings and calculations. The fee for graduation is five dollars.

The Courses of Instruction may be grouped as follows :

I. INTELLECTUAL PHILOSOPHY; ETHICS

Ex-President PORTER :—*Philosophy; Ethics.* The course will include special topics in the theory of knowledge, and the relations of Science to Theism; the theory of Ethics, and the relations of Ethical to Political Science.

Professor LADD will lecture on Psychology, the Theory of Cognition, Metaphysics, and the Philosophy of Religion. This course occupies two years. The subjects for 1886-87 are taken from Psychology and Metaphysics.

He will also conduct another course, consisting of lectures, text-book exercises, discussions, papers by the pupils, etc., two hours per week. This course for 1886-87 is based upon the study of Lotze's *Microcosmus*.

The undergraduate courses in Physiological Psychology and the History of Philosophy (see p. 35), are also open to graduates; and the former is especially recommended to those who wish to make a thorough study of Philosophy.

Professor RUSSELL will allow graduate students to attend his exercises and lectures on the Philosophy of Religion with the graduate class in the Divinity School.

Assistant Professor TARBELL's courses for undergraduates in the History of Greek Philosophy, in Mill's Logic, and in the Logic of Chance (see pp. 35, 36), are open to graduate students.

II. POLITICAL AND SOCIAL SCIENCE; LAW; HISTORY

Professor SUMNER:—1. *Finance and the Science and Art of Politics in the History of the United States*. This course occupies two years, two hours per week. In 1886-87 the second part, history from 1820 to 1880, will be given. It is assumed that those who attend this course have a good knowledge of the civil history of the United States.

2. *The Industrial Organisation of Modern Society*; two hours a week, through the year 1886-87. This course is one of advanced Political Economy. It treats of the modern industrial system in its evolution and existing organization. Special topics will be: industrial forces and aids, plants and animals, diet, geographical distribution of population, migration, vital phenomena and the family, division of labor and coöperation of industrial groups in wages and other systems, transportation and rent, talent and superintendence, risk and accident, supply and demand, value and the market, automatic coöperation in commerce and by finance, the time relation and credit, re-examination of money problems, industrial and commercial geography; also commercial crises, strikes, boycotting, and other signs of defects in the organization, and the adjustment of interests, by competition and custom, between the parties in the system.

3. *Sociology, with elementary study of Human Palæontology, Archaeology, and Ethnology*; two hours a week through the year 1887-88.

The last two courses are given in alternate years.

Professor FARNAM:—*The Principles of Public Finance*; one hour a week, through the year. This course treats of the income and expenditure of government, considered with regard both to the practical administration of modern states and to the economic principles involved. Leading topics are: the budget, taxation (national and local), public debts, and state banks considered as aids to public credit.

Professor HADLEY:—1. *Railroad Administration*; two hours a week, during the first term. This course deals with railroad expenditures and receipts, the methods of railroad accounting, railroad rates and discriminations and their effects upon the community, the various methods of legislative control and their results.

2. *Industrial Legislation*; one hour a week, during the second term. This course deals, in alternate years, with:

(a) The grounds and limits of state interference with industry, the history of the right of private property, the arguments concerning private ownership of land and capital and concerning freedom of contracts.

- (b) The specific legislation of different states and countries concerning corporations and other associations, factories, transportation, and concerning public safety and health in their industrial bearings.

Section *a* was given in the spring of 1886. Section *b* will be given in 1887. Each part is so far independent of the other that it makes little difference in what order they are taken.

Mr. A. S. WHEELER:—*Roman Law*; one hour a week, through the year. History and Institutes of Roman Law; select titles from the Digest, together with illustrative cases.

Mr. RAYNOLDS:—*Comparative Constitutional Law*; one hour a week, during the second term. A study of the modern Constitutional State, with a comparison of the principal forms of constitutional government, the theories on which they are based, and their practical working.

Mr. WHITE:—*Local Government in the United States*; one hour a week, during the first term. An elementary treatment of the legal functions of cities, towns, counties, and other municipal corporations and quasi-corporations, with an examination of the practical working of their governmental machinery.

Mr. BOURNE:—*A View of Trade and Industry in Europe in the Middle Ages*; one hour a week, through the year. Beginning in the later days of the Roman Empire, after a hasty review of the social conditions of the time, the lecturer will discuss the development of the various forms of industry and trade in vogue from time to time during the Middle Ages. Special attention will be given to the Levant trade, Hanseatic League, agriculture, the guilds, money, and restrictions on trade.

Professor PLATT:—*Jurisprudence*; Analysis of the general conceptions common to the legal systems of modern progressive communities.

Professor ROBINSON:—*History of Real Property*; *Canon Law*; *Parliamentary Law*.

Professor BALDWIN:—*Conflict of Laws*; *Comparative Jurisprudence*; one hour a week, through the year. The French Codes and Wharton's

Private International Law are made the basis of this course; some topics of Roman Law are also taken up.

[NOTE.—The student may also avail himself, by private arrangement with the several instructors, of the opportunities furnished in the LAW SCHOOL for studies in International Law, American Constitutional Law, etc.]

Professor BREWER:—*Physical Geography in its relations to Political History*; a course of about eight lectures discussing the following topics: 1. The physical relations of man to the region he inhabits; 2. The physical conditions and natural productions necessary for civilization; 3. Natural aids to the defence and protection of communities; 4. Natural facilities for commerce; 5. The effects of natural conditions now modified by modern inventions.

Professor FISHER:—*Ecclesiastical History*. Among the topics treated are: the Establishment and Spread of Christianity, the Relations of the Church to Civil Society in the Middle Ages, the Protestant Reformation and Systems of Polity, the History of Christian Worship and Christian Doctrine.

Professor WHEELER:—*Political and Constitutional History of England since 1689*; two hours a week during the second term.

Professor DEXTER:—*American History*. The instructor will meet students once or twice a week through the year for discussions and reports on selected themes. He will also mark out and supervise courses of reading, and will direct students in the investigation of special topics and in the preparation of theses.

III. PHILOLOGICAL SCIENCE; LITERATURE

Professor WHITNEY:—*the General Principles of Linguistic Science; the Comparative Philology of the Indo-European Languages; the Sanskrit Language*.

Professor HARPER will give instruction in the following subjects:

I. *Hebrew*; two courses, each four hours a week. (a) Genesis i-viii, and in connection with these chapters the grammatical principles of the language; rapid translation of Exodus i-xx, and Deuteronomy; critical examination of Genesis xlix, Exodus xv, Deuteronomy xxxii, xxxiii, Judges v; lectures on Hebrew Poetry and Pentateuch criticism. (b) Selections from Isaiah, the Minor Prophets, Job, and Proverbs; advanced Hebrew Grammar; Hebrew Syntax; lectures on the principles of Textual Criticism, and the later Hebrew literature.

II. *Assyrian*; two courses, each of two hours a week. (a) The transliterated and cuneiform texts in Lyon's Assyrian Manual, and in connection with these the grammatical principles of the language; selected texts from Delitzsch's *Lesestücke*; lectures on Assyrian History and literature. (b) Selected texts from I and V Rawlinson;

examination of the original vocabularies from II and V Rawlinson ; lectures on Assyriology in its bearings upon the Old Testament.

III. *Arabic*; two courses, each two hours a week. (a) The Arabic translation of Genesis i-viii, and in connection with these chapters, the grammatical principles of the language as given in Lansing's Arabic Manual ; selections from the Kuran ; lectures on the contents and arrangement of the Kuran. (b) Arabic Syntax (Wright's), with special relation to Hebrew Syntax ; selections from the Kuran ; selections from the Arabic poets.

IV. *Aramaic* ; two courses, each one hour a week. (a) Biblical and Targumic Aramaic, with Brown's Aramaic Manual. (b) Syriac, with Nestle's Grammatica Syriaca.

Professor SEYMOUR :—*Greek*. In addition to the elective courses offered in connection with the ACADEMICAL DEPARTMENT (see page 42), the following courses are provided :

I. *Plato* : one hour a week through the year ; rapid reading, to further familiarity with Plato's style and works.

II. *Greek Dialects* : three hours a week through the first term. Caer's Delectus Inscriptionum Graecarum will be used in connection with the fragments of the Lyric Poets.

III. *Greek Lyric Poetry*, with special reference to Greek Metres ; three hours a week, through the second term.

Topics for special investigation will be assigned to the graduate students in course 60 (page 42), as well as to those in courses II and III.

Professor PECK :—*Latin*. The elective courses open to graduate students in connection with undergraduates are given above (page 41). The instructor will also, two hours weekly, interpret the Annals of Tacitus during the first term, and Lucretius during the second term. Through the second term he will also conduct weekly exercises in Early Latin. In connection with these courses special topics will be assigned for investigation and discussion, as the Latinity of the separate authors and periods, the rationale of constructions, historical syntax, pronunciation, etymology, etc.

Mr. VANNAME :—*Elements of the Japanese Language*.

Professor BEERS :—*Anglo-Saxon ; Early English*. This course includes readings in Sweet's Anglo-Saxon Reader, Skeat's edition of the Chronicles, the first part of Beowulf (Harrison's edition), and selections from Mätzner's Altenglische Sprachproben. Reference is made to Sievers' Grammar, Skeat's Etymological Dictionary, tenBrink's History of English Literature, and Earle's Handbook of Anglo-Saxon Literature.

Professor KNAPP :—*Spanish ; Italian ; Old French and Provençal (including Catalan, ancient and modern)*.

Assistant Professor RIPLEY :—*German Grammar* ; one hour per week, during the second term. A course of twenty lectures on the historical development of the sounds and inflectional forms in Modern German.

Constant comparison will be made with the old and middle high German, and, to some extent with the Gothic. The phenomena of Ablaut and Umlaut, etc., will be discussed and the principles governing these and other linguistic changes in German deduced and set forth so far as possible.

Of the elective courses offered to undergraduates (page 38), Nos. 28 (with Mr. RIPLEY) and 30 (with Mr. NICHOLS) are also open to graduate students.

IV. MATHEMATICS

Professor NEWTON:—*Analytical Statics; The Dynamics of a Particle, and of a System of Particles.*

The Mathematical Theories of Shooting Stars and Meteors, and the Treatment of Observations of them; The Lunar and Planetary Theories. Higher Geometry.

Professor CLARK:—*Determinants, with applications.*

Theory of Curves and Surfaces.

Definite Integrals; Differential Equations.

The Kinematics of a Rigid Body.

Professor GIBBS:—*Vector Analysis*, with especial reference to physical applications.

Theory of the Potential, and allied topics.

Mathematical Theory of Electricity and Magnetism.

Electro-magnetic Theory of Light. Propagation of the electrical disturbance in isotropic and aeolotropic media. Reflection at a surface where two such media meet. Dispersion of colors.

A short course on *The a priori Deduction of Thermodynamic Principles from the Theory of Probabilities.*

Graduates will also in many cases find it profitable to take some of the mathematical courses offered to the undergraduates. (Cf. p. 45.)

V. PHYSICS; CHEMISTRY

Professor LOOMIS:—*Meteorology*, with special reference to the laws of storms.

Professor A. W. WRIGHT:—*Experimental Physics.* Direction of practical work in the Sloane Physical Laboratory, with instruction in the principles and methods of physical investigation, the processes and instruments of measurement, and the methods of computing and reducing results of observations. Special attention is paid to practical measurements in electricity and magnetism.

The student is expected to make original investigations an important part of his work, and has the free use of the laboratory facilities for carrying them on.

Professor HASTINGS:—A course in *Physics* will consist of laboratory work, supplemented by lectures on the theory of observation, with the method of least squares, and, each year, some special department of physics will be selected for detailed treatment in a course of lectures and conferences. During 1885-86, lectures on the theory of electricity and electrical instruments occupied six months. The use of the laboratory is at the command of the student at all times.

Professor JOHNSON:—*Organic Chemistry*; two hours weekly throughout the year. Systematic review of the various classes of carbon compounds, with detailed study of substances that illustrate current chemical doctrines or are important in nature and in the arts, with experimental demonstrations.

Professor ALLEN and Mr. H. L. WELLS:—*Analytical Chemistry*; including a systematic course in Qualitative Analysis, a systematic course in Quantitative Analysis, and such special branches of Quantitative Analysis as are applied to Mineralogy and various departments of Metallurgy.

Instruction in analytical processes and chemical principles involved in them, is given to each student separately in the laboratory. Laboratories are open seven hours daily (except Saturdays).

Professor CHITTENDEN:—*Physiological Chemistry*. Graduate students having sufficient knowledge of analytical chemistry and physiology are received into the laboratory at the beginning of the academic year, where they can pursue a course in physiological chemistry and toxicology, extending throughout the entire year. The course necessitates, on an average, four hours of laboratory work per day, and attendance on lectures and recitations three or four times per week. Opportunities are also afforded for the carrying on of original investigations, either in physiological chemistry or experimental toxicology, and to students qualified for such work the laboratory is open during the entire day.

Students desirous of studying any special subject in physiological chemistry and having but a limited amount of time are also received, provided they are qualified by previous work to pursue the study advantageously.

VI. GEOLOGY; NATURAL HISTORY

Professor J. D. DANA:—*Geology*. The subjects taught in the course are Physiographic and Lithological Geology, with Historical and Dynamical Geology in alternate years; and for an advanced elective, the reading and discussion of original memoirs and other publications in all these departments, together with work in the field. For practical illustrations of the various subjects, the instruction is supplemented by excursions to regions, severally, of sedimentary, metamorphic, and

igneous rocks ; of variously flexed, jointed, altered and degraded rocks ; of seashore action and its results ; of glacial, fluvial and other Quaternary phenomena ; excellent localities for the study of these various subjects are found in the vicinity of New Haven, but excursions extend also to neighboring parts of New England and New York.

Professors BRUSH and E. S. DANA, and Mr. S. L. PENFIELD :—*Mineralogy*, in its different branches : (1) Descriptive Mineralogy : including the study of mineral species individually and in their relations to each other in composition, association, and so on. (2) Crystallography and Optical Mineralogy : the study of the mathematical relations of the forms of crystals, the measurement of crystals on the goniometer and their practical determination ; also, the study of the optical characters of the different groups of crystals, the determination of the position of the axes of light-elasticity, measurement of indices of refraction, of the optic axial angles, etc. (3) Determinative Mineralogy and Blowpipe Analysis : the study of the use of the blowpipe and its application to the determination of a mineral species.

Microscopical Petrography : the methods of research and the use of the microscope, the practical study of rocks in thin sections and in hand specimens.

Professor EATON :—*Botany*. At present there are no facilities for the profounder study of Vegetable Physiology. Structural Botany is taught in a practical way to the extent of preparing and examining microscopic specimens of the various tissues and elements found in phænogams, and in cryptogams exclusive of fungi, including the use of the ordinary solvents, dyes, reagents, and mounting media used in this study. For the study of the North American Flora generally, and the higher orders of cryptogams, with regard to their identification and geographical distribution, the facilities are excellent, and, under proper restrictions, students may have the privilege of consulting the very extensive private collections of the professor in charge.

Professor VERRILL :—*Zoology*. The course includes laboratory practice, recitations, readings, and lectures. The laboratory work is varied according to circumstances, in order to accommodate, so far as possible, those students who may wish to pursue special branches. A large part of the time is usually devoted to Comparative Anatomy, Morphology, and Systematic Zoology. Ample collections in the Peabody Museum, representing all classes of animals, are available for instruction, while the proximity to the sea renders it easy to provide fresh or living examples of most classes of marine animals for study and dissection.

All students in this course should be familiar with the use of the microscope. A knowledge of drawing sufficient to enable the student to make sketches of the objects studied is very desirable.

Professor S. I. SMITH:—*Elementary Anatomy and Histology*; two to four half-days a week during the first term. Laboratory instruction will be given with special reference to preparation for medical studies, or as a preparation for further biological study and investigation. The instruction will be adapted as far as possible to the special wants of the individual student.

During the last part of the second term, graduate or special students who desire to do so may attend the short course of lectures on embryology, with special reference to human morphology given to undergraduates in the course in biology (see above, p. 77).

VII. APPLIED SCIENCE

Professor LYMAN:—*Practical Astronomy*. Instruction, especially adapted to candidates for the degree of Civil Engineer, is given in practical Astronomy applied to Geodesy, using as guides the treatises of Loomis and Doolittle. The practical instruction embraces the use

(1) Of the Theodolite or Surveyor's Transit for determining time, latitude, and azimuth;

(2) Of the Sextant and Reflecting Circle for time, latitude, and longitude;

(3) Of the combined Portable Transit instrument and Zenith Telescope, for time, latitude by Talcott's and other methods, longitude by moon culminations, etc. The instrument used is of three-foot focus and 2.6 inches aperture, with fine alidade level and position filar micrometer.

(4) The Meridian Circle (with five-foot telescope) is also available for transit and other observations, as well as the Clark Equatorial of nine inches aperture, and a five-foot portable telescope by Clark, for occultations and other work.

Special students in Practical Astronomy are permitted to take up such branches of the subject, with the use of any of the above-mentioned instruments, as may best suit their purposes.

The time devoted to the subject will vary with the taste and purpose of each student and the time at his disposal. But for the degree of Civil Engineer, a good familiarity with the instruments named in 1, 2, and 3, as well as with the corresponding computations and practical problems, is required.

Professor JOHNSON:—*Agricultural Chemistry*; two hours a week, through the year. This course includes the following topics:

(1) *Chemical Composition of Agricultural Plants*; nature and properties of the important organic proximate principles, viz: the carbohydrates, organic acids, fats, albuminoids, amides and alkaloids; the ash-ingredients, essential and accidental, their offices and variations.

(2) *Structure of Plants*; character and functions of their organs, vegetative and reproductive, viz : root, stem, leaves, flowers and fruit.

(3) *Life of the Plant*; germination, its phenomena, conditions and chemistry ; vegetable juices, their nature and movements.

(4) *The Atmosphere*; its chemical and physical relations to plant life and nutrition.

(5) *Soils*; their origin, formation, composition, physical properties, and their ingredients considered as sources of plant food and as factors in the development of vegetation.

Professor C. B. RICHARDS:—*Mechanical Engineering*. This course, arranged for candidates for the degree of Mechanical (or Dynamical) Engineer, is also open to Special Graduate Students, who will be allowed in certain cases to take selected parts. The leading topics are:

(1) *Applied Mechanics*; including graphical methods in applied kinematics, and in the investigation of mechanisms working with friction ; graphical determinations of the accelerations of the moving parts of machines ; the strength of materials as affecting the proportions of machine elements ; the applications of the principles of hydraulics to the construction and working of turbines and pumps.

(2) *Thermo-dynamics*; applications to the compound steam engine, air compressors and compressed air motors, engines worked by volatile vapors, refrigerating machines, the warming and ventilation of buildings.

(3) *Machine Design*; in this course the student is engaged in practical exercises under the guidance of the professor in charge, investigating machinery, and designing and making working drawings, specifications, and estimates for machines and manufacturing plant. In addition to the study of machines in general, either of the following subjects will at the option of the student receive particular attention ; (a) Marine Engineering ; (b) Railway machinery ; (c) Pumping machinery and plant ; (d) Machinery and plant for manufacturing. The student is required to make complete drawings, from new designs, of at least one important piece of machinery under one of these subjects. A compound marine engine and boilers, a locomotive, a turbine, driving centrifugal pumps, a blowing engine for an iron furnace, are examples.

Candidates for the degree of Mechanical Engineer are required to take also a selected course in Mathematics, to sustain a final examination, and to present a satisfactory thesis on a subject approved by the professor in charge of the course.

A course in applied electricity, and, when the facilities in the physical laboratory permit, a course of laboratory work under the superintendence of the professor in charge ; also, lectures on Industrial Legislation and Finance, and lectures on the higher Mathematics, are open to all students in this course.

Professor DuBois:—*Civil Engineering*. This course offers instruction for advanced graduate students, as well as for those students who may be regular candidates for the degree of Civil Engineer. It embraces the following topics:

(1) *Mechanics applied to Engineering*; including a course in Hydraulics, with reference to the various problems which arise in connection with water-supply, water-power or irrigation; the efflux of water, flow through orifices and mouthpieces and over weirs, simple and submerged; questions of overflow and land damage; the effect of friction, contraction, enlargement, bends, valves, etc.; measurement of the discharge of pipes, rivers and streams; the theory and design of water-motors; a course in Thermo-dynamics and its practical application to hot-air, gas and steam engines, and the heating and ventilation of buildings.

(2) *Surveys and Geodesy*; including methods of observation, base measurements, triangulation field work, theory of least squares, adjustment of observations, calculation of the triangulation, and computation of geodetic latitudes, longitudes, and azimuths.

(3) *Construction and Design*; including the strength and properties of materials, construction and design of bridges, roofs, foundations, retaining walls, dams and embankments, masonry, arches, sewerage and drainage, improvement of rivers and harbors, specifications and contracts, and the preparation of designs and working drawings.

Candidates for the degree of Civil Engineer are required to take, in addition, a selected course in Mathematics, Practical Astronomy, and, when the facilities in the physical laboratory permit, a course of laboratory work, under the superintendence of the professors in charge. They are also required to sustain a final examination, and to present a satisfactory thesis accompanied by appropriate designs, upon a subject approved by the professor in charge of the course.

To special students, not candidates for the degree of Civil Engineer, a selection of special topics is allowed. The lectures of the Department upon Railroad Administration, Industrial Legislation and Finance, and upon the higher Mathematics are open to all the students in this course.

VIII. FINE ARTS

For the instruction offered in the Fine Arts, see page 108.

SCHOOL OF THE FINE ARTS

COUNCIL

The Council of the School consists of the President of the University, the President of the National Academy of Design, the President of the New York Museum of Art, and the Director of the School, who is the Secretary ; together with four members by election : Donald G. Mitchell, LL.D., Edward E. Salisbury, LL.D., John Davenport Wheeler, Ph.B., and William W. Farnam, M.A.

FACULTY

Rev. TIMOTHY DWIGHT, PRESIDENT
JOHN F. WEIR, *Director, and Professor of Painting*
Rev. JAMES M. HOPPIN, *Professor of the History of Art*
JOHN H. NIEMEYER, *Professor of Drawing*

FREDERIC R. HONEY, *Instructor in Perspective*
JOHN P. C. FOSTER, M.D., *Instructor in Anatomy*
HARRISON W. LINDSLEY, *Instructor in Architecture*

• FRANK C. BOARDMAN, *Librarian*

ORGANIZATION AND COURSE OF STUDY

The School aims to provide thorough technical instruction in the Arts of Design, viz : Drawing, Painting, Sculpture, Architecture, and Copperplate Etching ; and to afford a knowledge of such branches of learning as relate to the Philosophy, History, and Criticism of Art. As a professional School of Art it aims to furnish a thorough course of study in the practice of the studios ; and as a department of the University it aims to provide instruction in Art as a constituent part of the scheme of general culture. These departments, of Practice and Criticism, may be regarded as distinct or correlative.

THE TECHNICAL COURSE

The technical instruction, for professional students, is based upon methods well adapted to discipline the æsthetic faculties and ground the pupil in the elements, or fundamental principles, which constitute the grammar of Art, as a foundation for all forms of special application. This instruction is arranged as follows:

IN DRAWING, the work is distributed over a three years' course. During the first year the practice of the studio is confined to drawing from the "Antique"—from plaster casts; during the second year, to drawing from casts and the living-model; and during the third year, to drawing from the living-model—nude and draped. The classes under the supervision of the Instructor in this department are the antique, portrait, nude-model, sketching, and composition classes; and until the Chairs of Sculpture and Copper-plate Etching are filled, these branches are included under the same supervision. Students showing the requisite proficiency in any class, will be advanced to the work of the second or third year according to individual ability. Instruction in this department precedes all special courses in the various branches of Art; no pupil is allowed to enter any of the advanced classes without this necessary qualification in that degree of proficiency which is deemed essential as a preliminary ground for such studies. Lectures on the principles of decoration, as applied in the various branches of Decorative Art, are included in this department; and a special course in "free-hand drawing" is arranged to meet the requirements of students in the Sheffield Scientific School, extending through the first term of the year.

IN ANATOMY, instruction is given in the form of lectures, and by drawings made from specimens and casts. The lectures are divided into two courses, for elementary and advanced classes. Each course consists of twenty lectures, one lecture a week to each class, continuing through the Winter and Spring Terms. The elementary course is devoted to the study of such portions of the human body as manifestly affect the external forms; the aim being to familiarize the pupil with the characteristics of those parts, independently of their combined action in modifying the external forms. Drawings of these parts are made by the pupils, in connection with the subjects discussed by the lecturer. The advanced course includes the whole structure of the human form in its plastic anatomy and mechanism. The skeleton and muscular system are viewed as a whole, and the modification of the external forms studied in action and repose. The subjects of proportion, equipoise and motion, and expression, are studied, and original drawings

required in illustration, made from life, or from Greek sculptures, by reducing the same to their anatomical structure by the imagined removal of the integument.

IN PERSPECTIVE, the instruction is likewise given in the form of lectures, divided into two courses of twenty lectures each, for an elementary, and an advanced class, illustrated by examples drawn on the black-board, illustrating the principles under discussion. The lectures are supplemented by practical exercises. The student is required to work out examples in the interim between the lectures. The elementary course includes the principles of plane geometry underlying perspective,—simple projections, or plan and elevation drawings. Objects are treated with reference to their true dimensions, as preliminary to their correct representation on a flat surface, as seen in perspective, at various distances, and from different points of view. The advanced course includes the study of shadows and reflections, and the application of the general principles of perspective to interior and exterior views. The pupil is required to work out problems in illustration of all the principles involved in linear perspective in its application to the various branches of art.

IN PAINTING, the work is divided into an elementary and an advanced course of study. The first studies are devoted to the acquisition of a knowledge of the elements of technical practice, by-painting from still-life. When the pupil has acquired some knowledge of the means in representing objects in color, as to the values and relations, the remainder of the course is given to studies of the living-model, in portrait, figure, and composition. This is continued while the pupil remains in the School. The course in painting implies, on the part of the pupil, a requisite knowledge of drawing, and drawing from the living-model is continued throughout the course in connection with the work in color. The practice of the Studio is supplemented by illustrated lectures on Color, Chiaroscuro, Composition, and such other special topics as relate to the principles and means of Art, or are comprehended in its theory and practice.

IN MODELING, a course is provided, including the anatomical lectures, and drawing. The work in this branch of instruction consists in first modeling in clay, from casts of Greek fragments, the head and other extremities of the human form, and then the whole figure. When the student has sufficient command of the method and means, the rest of the course is devoted to modeling from the living subject.

IN ARCHITECTURE, the course includes drawing, as provided in that special department in its elementary instruction, as well as the course in isometric projection and perspective. Under the instructor in Architecture studies are made from notable examples of the various orders

and styles, in chronological order, with original projects in illustration to be worked out by the student. The means and methods of preparing plans, elevations, sectional and working drawings, and perspective views in india-ink and water-color, are comprehended in the elementary part of this course. Arrangements may be made with other departments of the University, by which students in Architecture can obtain the requisite instruction in mathematical subjects having a direct bearing on this art, including plane geometry, stone-cutting, the nature and strength of materials, and the principles of construction and engineering.

Under the instructor in Architecture the course includes a general and comprehensive view of the historic development of the various architectures, with a comparative analysis of the same with respect to their principles of construction and decoration.

IN COPPER-PLATE ETCHING, a course is provided, and a room set apart for this special study, containing all the necessary appliances of this art, including a press. The instruction in this branch of art is, for the present, in charge of the Professor of Drawing.

COURSE IN THE HISTORY AND CRITICISM OF ART

The instruction in this department includes courses of lectures by the various Instructors of the School, arranged to include both professional students in regular course, and classes from other departments of the University where it is recognized as an "elective" study.

IN THE HISTORY OF ART, the course is as follows: 1. *The Origin of the Art* principle—Hegel, Lotze, Ruskin; 2. *Egyptian Art*—Perrot and Chipiez, "Histoire de l'Art de l'Antiquité," etc.; 3. *Oriental Art*, with special reference to its influence on Greek Art—Schnaase, Fergusson, Perrot and Chipiez, etc.; 4. *Greek Art*, Principles of Greek Art; Pelasgic construction, and the three orders of Greek Architecture; Greek Sculpture, including the Archaic, Phidian, and Naturalistic periods, and the Græco-Roman; with recent researches at Olympia and other places; *Greek Painting*, Ceramic, Mosaic, and Mural—Winkelmann, Lessing, Ottfried Müller, J. Overbeck, Schnaase, Friedrichs, Charles Blanc, and Woltmann; 5. *Roman Art*—Fergusson, Dennis, Emil Braun, etc.; 6. *Beginnings of Christian Art*, classic sources and types; Religious Art; early Christian Painting and Iconography; early Christian Architecture—Lindsay, Fergusson, etc.; 7. *Byzantine Art*, Oriental, Christian and Saracenic forms—Fergusson, Ruskin, etc.; 8. *Mediæval Art*, Romanesque and Lombardic; Tuscan, Southern and Northern Gothic—Viollet-Le-Duc, Ruskin, Fergusson, etc.; 9. *The Renaissance*; rise of the Florentine School, and the Schools of Sienna, Umbria, Lombardy, Rome, and Venice

—Vasari, Lanzi, Kugler, Ruskin, Crowe and Cavalcaselle, Symonds, etc.; 10. *Modern Art*—Schools of Spain, Holland, Germany, France, and England; the Pre-Raphaelite, Romantic, and Impressionist movements; Art in America. The lectures are illustrated by means of the hydro-oxygen lantern.

IN THE PRINCIPLES AND MEANS OF ART, a course of twelve lectures is provided, fully illustrated, embracing the subjects of Line, Chiaroscuro, Color, Composition, and Expression,—following the path of the artist in his work. A course of twelve lectures discussing the technical methods of the Painter, the Sculptor, the Architect, and the Engraver, including an historic account of the technical development of these arts, is also provided.

The regular prescribed course of study, for professional students, covers a period of three years, but pupils are encouraged to remain in the School and pursue advanced studies after the expiration of the prescribed term. The fees are at the rate of \$12 per month, with an annual fee of \$5. No pupil is received for a term of less than three months. The tuition fee for a fourth year's attendance is one-half the usual rate; pupils remaining for a longer period are classed as "honorary students"; as such they are exempt from the payment of a tuition fee, but are charged an annual fee of \$10. The School is open to both sexes; no pupil is received under fifteen years of age. All applications for admission should be made through the Director. The School opens on the 1st of October, and closes on the 1st of June. At the end of the School-year an exhibition of the work of the various classes of pupils is held, continuing open through the summer months. The closing exercises are held on the 1st of June.

CERTIFICATES are awarded to pupils remaining in the School through the regular course of three years; and a DIPLOMA is awarded, on the ground of merit alone, to such students as fulfill all the requirements of a prescribed course of advanced studies in the several departments of instruction.

The "ETHEL CHILDE WALKER PRIZE," the income from a foundation of \$200, is awarded annually, under certain restrictions, to the most deserving pupil in the professional department.

THE ART LIBRARY, containing a collection of technical hand-books, current art-periodicals, and portfolios of engravings, is open, during specified hours, for the use of students. The pupils of the School are entitled to the use of the University Library, and to such other privileges, under the usual restrictions, as are granted to students in the other Departments.

Season-tickets, at 50 cents each, admitting the holder to the Galleries and Exhibitions throughout the year, are furnished to the undergraduates of all Departments of the University.

THE COLLECTIONS embrace "The Jarves Gallery of Italian Art," numbering one hundred and twenty-two paintings dating from the 11th to the 17th centuries; the "Trumbull Gallery" of historical portraits and other works, numbering fifty-four pictures; a collection of contemporaneous art, numbering about one hundred paintings; a collection of about one hundred and fifty casts and marbles, representative of the various periods of Greek and Renaissance Art; a valuable collection of Chinese porcelains and bronzes, loaned by Mr. F. W. Williams; and a series of very valuable Belgian wood-carvings of the 16th century, deposited in the School by Mrs. A. C. Alden. The Collections are open daily for the use of students: and to the public, during the winter, from 1 to 5 P. M., and during the summer from 9 A. M. to 6 P. M.

The Art Building was erected in 1864, by Mr. Augustus R. Street (Yale College 1812), of New Haven, at a cost of about \$220,000. The School was partially endowed, to the extent of \$81,500, by Mrs. Street, who also made other gifts in aid of its objects.

DEPARTMENT OF THEOLOGY

(YALE DIVINITY SCHOOL)

FACULTY

- REV. TIMOTHY DWIGHT, PRESIDENT
REV. GEORGE E. DAY, *Professor of the Hebrew Language and Literature and Biblical Theology (Old Testament)*
REV. SAMUEL HARRIS, *Professor of Systematic Theology*
REV. GEORGE P. FISHER, *Professor of Ecclesiastical History*
REV. LEWIS O. BRASTOW, *Professor of Homiletics and the Pastoral Charge*
REV. JOHN E. RUSSELL, *Professor of Biblical Theology (New Testament)*
REV. GEORGE B. STEVENS, *Professor of New Testament Criticism and Interpretation*
-

- MARK BAILEY, *Instructor in Elocution*
THEOPHILUS HENESS, *Instructor in German*
WILLIAM R. HARPER (*Professor of the Semitic Languages*), *Instructor in Hebrew*
-

SPECIAL LECTURERS

- REV. WASHINGTON GLADDEN, D.D., LYMAN BEECHER LECTURER, *on the Relation of the Church and Ministry to Socialism*
REV. JOHN HALL, D.D., LL.D., *on the Pastor in the Study, the Pulpit, and the Parish*
REV. EDWIN P. PARKER, D.D., *on Hymnology and Church Music*
REV. WILLIAM HAYES WARD, D.D., *on Archaeological Investigations in the East*
PROF. LEONARD J. SANFORD, M.D., *on the Preservation of Health*
-

THE CONDITIONS OF ADMISSION to this Department are membership in some evangelical church, or other satisfactory evidence of Christian character, and a liberal education at some College or University, or, in exceptional cases, an equivalent preparation for theological studies. Students of every Christian denomination, in case they are possessed of these qualifications, are admitted.

It is expected that every student will be promptly on the ground at the beginning of the session. Rooms are assigned in the order of application, but no room is reserved for any applicant who neglects to appear, beyond one week after the opening of the term.

THE REGULAR COURSE OF INSTRUCTION occupies three years, and is arranged in the following order :

JUNIOR YEAR :

Professor DAY will lecture once a week on the Encyclopedia and Literature of Theology, including a survey of the various branches of Biblical Literature, and an account, more or less extended, of the prominent writers and their works in the several departments of theological science. He will also read with the class, in the latter part of the year, portions of Delitzsch's Hebrew translation of the New Testament, as compared with the original Greek and the English and Continental Revised Versions.

Professor HARPER will give instruction in the grammatical principles of the Hebrew language in connection with the first eight chapters of Genesis ; translation of these chapters from English into Hebrew and the acquisition of a vocabulary in the ground covered in his *Introductory Hebrew Method*, with a survey of the Pentateuchal criticism ; rapid reading of Exodus i—xx, and Deuteronomy ; translation at sight of the First Book of Samuel and a critical reading of Genesis xlix, Exodus xv, and Deuteronomy xxxii, xxxiii : Hebrew Syntax. Provision will also be made for the instruction of an advanced class in Hebrew.

Professor STEVENS will lecture four times a week on the Synoptic Gospels. The work will be conducted on the basis of Mark, but the parallel passages will also be read in the class and critically examined. It is designed to make this course a thorough study of the Life of Christ, with special reference to the successive stages of his teaching. Recitations will also be held in connection with the lectures, in which the members of the class will be examined upon the passages read. During a portion of the year lectures will be given on the General Introduction to the New Testament, including the principles of Textual Criticism, and on Special Introduction to the Synoptic Gospels, including the problems of their origin and relation. Essays on themes connected with critical New Testament study will be presented by the students and discussed in the presence of the class.

President DWIGHT will lecture twice a week on the Epistle to the Galatians or one of the other Epistles of Paul.

Professor HARRIS will lecture twice a week on the Philosophical Basis of Theism, on Natural Theology, the Evidences of Christianity,

and the Inspiration of the Scriptures ; also, as incidental to these topics, on the various forms of Skepticism.

Professor FISHER will deliver a series of lectures during the latter part of the term on Ancient History. These lectures will include a discussion of the literature on the subject, as an aid to the student in pursuing historical studies by himself. They are intended to serve the purpose of an introduction to the History of the Church.

MIDDLE YEAR :

Professor HARRIS will lecture five times a week on Systematic Theology. This course will include a full and systematic investigation of the doctrines of Christianity, and of existing questions and controversies concerning them. The subjects will be treated in the following order: The Attributes of God ; The Trinity ; God the Creator, and his End in Creation ; God's Providential Government ; God's Moral Government ; Sin ; Redemption—the Atonement, Regeneration, Justification by Faith, the Spiritual Life ; the Kingdom of Christ on Earth, its Progress and Triumph ; Eschatology. Examinations on the topics discussed will be connected with the lectures, and entire freedom of question and discussion at every lecture is invited.

Professor DAY will give instruction twice a week in Old Testament Biblical Theology, with special reference to the progressive stages of Divine revelation, as connected with the history and religious institutions of the people of Israel, prophecy, and the wisdom of the Hebrews. He will also lecture once a week on portions of the poetical books of the Hebrew Scriptures, and will give instruction in Chaldee to such members of the class as may desire it.

Professor FISHER will give instruction three times a week on General Church History, embracing specially the branches of the subject which are not included under the History of Doctrine. They comprise the following topics: The Nature, Divisions, and Sources of Church History, with a Review of the Literature on the subject ; the Old or Preparatory Dispensation in its relation to Christianity ; the condition of the Græco-Roman World at the Introduction of the Gospel ; the Establishment of Christianity and the Conflicts of the Apostolic Age ; the spread of Christianity, including especially the Conversion of the Roman Empire and of the Teutonic Nations ; the Changes in Ecclesiastical Polity in the Early Centuries ; the Organization of Latin Christianity under the Papacy ; the Relations of the Papacy and the Church to Civil Society in the Middle Ages ; the Protestant Reformation, with its Causes, and the Systems of Polity adopted by the different Protestant Churches ; Christian Life, and its Characteristic Features in the Successive Eras (including the Rise and Subsequent History of Monasticism) ; the History of Christian Worship.

President DWIGHT will lecture once a week on the First Epistle to the Corinthians.

Professor STEVENS will lecture once a week on some one of the principal Pauline Epistles, with special reference to its doctrinal contents. For the current year the subject is the Epistle to the Romans. He will also conduct the exercises of a volunteer exegetical club, to which members of the Middle, Senior, and Graduate classes are invited. At this exercise the results of the students' critical study upon certain passages of special difficulty or doctrinal importance will be presented and discussed.

Professor BRASTOW will give instruction twice a week, by lectures and critical exercises, in the principles of Rhetoric as applied to the work of Christian preaching, with special reference to the cultivation of an appropriate pulpit style.

SENIOR YEAR :

Professor BRASTOW will give instruction four times a week, by lectures and critical exercises, in different branches of Practical Theology, as follows: he will lecture once a week on Homiletics, and once a week will conduct a class exercise in the criticism of sermons and plans of sermons. It is proposed to make these practical exercises a prominent feature in the course. He will, also, give private instruction at least twice during the year, to each member of the class in connection with the criticism of sermons, and will give personal aid in the study of Homiletical and General Literature. He will lecture twice a week upon Pastoral Theology, including the calling, training, and personal and official duties of the Christian ministry, with special reference to the leadership of the church in its various practical activities as connected with the interests of the Kingdom of God. He will also conduct class discussions of questions of practical interest relating to the work of the church.

Professor FISHER will lecture three times a week, through the year, on the History of Christian Doctrine and on Symbolical Theology. The course includes an explanation of the Origin of Theology as a Science, and a Discussion of True and False Theories of the Development of Doctrine; a Survey of the Influence of Philosophy on Theology in the Successive Eras; a Review of Authors in the field of Theological Literature; a History of Theological Thought in the Church, in relation to the several Doctrines of the Christian system, down to the present time; an account of the Comparative Tenets of the different religious bodies into which Christendom is divided.

Professor RUSSELL will give instruction three times a week in the Biblical Theology of the New Testament. It is the aim of this department to investigate the teaching of the New Testament in the character and historical connection in which that teaching is found in the writings of the New Testament. The lectures embrace the following topics:

Biblical Theology as a science and its relation to other branches of Theology; the principal forms of teaching exhibited in the New Testament; their differences and relationships; the historic connection of New Testament Theology with the Religion of the Old Testament and with the religious ideas of the later Judaism.

Professor DAY will lecture once a week on portions of the prophetic books of the Old Testament, and will read with those who wish to prosecute the study of Syriac, the Peshito version of the New Testament.

President DWIGHT will lecture once a week on the Book of Revelation.

GRADUATE OR FOURTH YEAR CLASS:

Into this class, which was established in 1879, only those who have completed a three years' course in this or some other Theological School, can be admitted. It is designed to meet the wants of those who desire to pursue an advanced course of general theological study, or to apply themselves to special subjects of reading or investigation in any of the departments of theology, for one year or more, under the advice and direction of the Professors and with the helps furnished by the Reference and University libraries.

For the present year, the following are the subjects, selected after conference between them and the Professors, to which the whole class, or portions of it, attend. Individual members of the class pursue other branches of theological study by private arrangement with the Professors.

- I. PRESIDENT DWIGHT: The leading Apostles and their thoughts.
- II. EX-PRESIDENT PORTER: Special Topics in Philosophy and Philosophical Theology.
- III. PROFESSOR DAY: Difficult passages in the Book of Isaiah.
- IV. PROFESSOR HARRIS: Reading of Dorner's System of Christian Doctrine.
- V. PROFESSOR FISHER: Weiss's Life of Jesus, read and discussed.
- VI. PROFESSOR BRASTOW: Schools of Preaching and the History of Preaching; with critical exercises and discussions.
- VII. PROFESSOR RUSSELL: Lotze's Microcosmus.
- VIII. PROFESSOR STEVENS: Exegesis of passages of special difficulty in the New Testament.

OPTIONAL STUDIES IN EITHER YEAR :

Professor HARPER will admit students who desire to pursue the study of Arabic or Assyrian into his graduate classes, free of charge.

Professor DAY will read with those students who desire to become familiar with the theological literature of Germany and have made sufficient progress in the language, some standard work in German on Christian doctrine, with critical remarks and references to the ablest works on special topics.

Professor WHITNEY will give instruction to those who desire it, in Sanskrit.

Dr. THEOPHILUS HENESS will give instruction, free of charge, to students who wish to learn to speak German.

Instruction in Vocal Music will be given during a portion of the year to students who desire it, by Dr. STÆCKEL, the Instructor in Music in the University.

PROFESSOR LADD's University Course on Psychology, Metaphysics, the Theory of Cognition, and the Philosophy of Religion, is particularly intended to meet the wants of Theological Students. A select number of advanced pupils in Philosophy will also be admitted to the Course in Lotze's *Microcosmus*. (See pp. 97, 98.)

The members of the Theological School, on conditions prescribed by the Faculty, are also allowed to attend, free of expense, any of the lectures in the COLLEGE, and also in the SHEFFIELD SCIENTIFIC SCHOOL, many of which are on subjects of special importance to pastors. These lectures are on the following subjects: *Moral Philosophy*, by Ex-President PORTER; *Intellectual Philosophy*, by Professor LADD; *History*, by Professor WHEELER; *Evolution and Cosmogony*, by Professor DANA; *Anatomy*, by Professor SANFORD; *Language*, by Professor WHITNEY; *Physical Geography*, by Professor BREWER; *Agricultural Chemistry*, by Professor JOHNSON; *Practical Agriculture*, by Professor BREWER; *Botany*, by Professor EATON; *Zoology and Entomology*, by Professor VERRILL.

Those who intend to become Foreign Missionaries have the further privilege of attending the lectures in the Medical School, on the payment of the matriculation fee of five dollars.

These opportunities for obtaining wider culture will be of special value to graduates of colleges and others who desire the means of pursuing studies to which they have not attended, or in which they seek further instruction.

ELOCUTION :

A thorough course of instruction in Elocution is given to the students, which is progressive in its character and extends through the three years of study for each class.

To the Junior Class a full course of lectures is given on the principles of logical and emotional analysis and expression, and on oratorical action and vocal culture. This is followed by individual practice in speaking and reading.

In the Middle year is added extended and frequent special practice in Scripture and hymn reading and the reading and delivery of sermons.

To the Senior Class the instruction is given mainly in private lessons, and is designed to meet, so far as possible, the special needs of each individual in his preparation for the duties of the preacher's office.

EXERCISES IN PUBLIC SPEAKING:

There will be an exercise for all the classes in the MARQUAND CHAPEL, under the direction of Professor BRASTOW and in the presence of the Faculty, once in two weeks, in the reading of the Scriptures and hymns, and in the delivery of sermons, or parts of sermons or addresses. Every alternate week there will be an exercise, designed to cultivate the power of the students in *extemporaneous speaking*, by the discussion of subjects of practical importance. Weekly debates are also held by the students in societies of their own.

LICENSE TO PREACH

The regular time for applying for license is at the close of the second year's study, before which time the members of the Seminary are not allowed to preach.

PUBLIC WORSHIP

Prayers, with reading of the Scriptures and singing, are attended every morning in the MARQUAND Chapel. It is optional with each student whether to attend worship on the Lord's day in the University Chapel, or in one of the City Churches; but whatever may be his decision, it is hoped that he will engage, so far as may not be inconsistent with the prosecution of his studies, in some form of City-Mission, Sabbath School, or other benevolent labor, for which constant opportunities are offered.

DEGREE

The Degree of Bachelor of Divinity is conferred on all members of the Department who at the end of the Senior year pass the prescribed examination, and present an approved thesis on some topic of theology.

LIBRARIES

The *University Library*, containing about 130,000 volumes in the various departments of literature and science, is especially rich in its theological part, and stands in this respect among the first libraries in the country. It is open five hours on every secular day for consultation and for the drawing of books. The Divinity students in common with the other members of the University have access to it without charge.

For a fuller notice of the advantages offered in this direction, the account of the Library in the General Catalogue of the University may be consulted.

The *Reference Library* of the Divinity School, established by the late Henry Trowbridge, Esq., of New Haven, and now placed in the Bacon Memorial Hall, erected in 1882 by the late Frederick Marquand, Esq., as a memorial of the late Rev. Leonard Bacon, D.D., is open for consultation during several hours of the day. It contains nearly 3,000 carefully selected volumes, in every department of theological literature, and is designed to take the place, for each student, of a large and well selected private library. The latest books and periodicals are constantly added to it as they appear.

The valuable *Library of Church Music* belonging to the late Dr. Lowell Mason, was given to the Seminary by his family. This library, which is one of the largest of its kind in the country, is placed in one of the rooms in the West Divinity Hall.

The united Libraries of the College Literary Societies, containing 30,000 volumes in general literature, are accessible to theological students.

The total number of volumes in the several libraries, which are open to students, is about 170,000.

PHYSICAL EXERCISE

The College Gymnasium is open to the students of this Department at a small charge. The facilities offered in this connection are described on page 57.

DIVINITY HALLS

The East Divinity Hall, which was erected in 1870, contains in addition to the Lecture Rooms for the three classes and rooms for the Professors, accommodations for about sixty students. The West Divinity Hall (parallel with the other building and adjacent to it) was erected in 1874, and has, in addition to the room containing the Lowell Mason Library, accommodations for ninety students. The rooms in these buildings are warmed by steam, and lighted by gas, and are provided with all furniture (except bed-clothes), which may be necessary for the occupants. They will be assigned to new students in the order of their application. A few of the rooms have two bedrooms attached to them, but, in general, provision is made for each student to room alone, and all students who desire it can have this privilege.

EXPENSES AND PECUNIARY AID

Students have only to make pecuniary provision for about eight months of study annually. In the four months of vacation, from May to September, they have the opportunity to engage in Home Missionary or other labor, with remuneration for their services.

The expenses for the annual session of 35 weeks are \$10 for each student for care of room and other incidental expenses; \$25 to \$30 for fuel and lights, or one-half of this sum in case two students occupy the same room. No charge is made for instruction or room rent, or for the use of Libraries.

The expense for board will be from \$3.25 to \$3.50 a week, at which prices most of the students have obtained good board during the past year.

Students in the Junior, Middle, and Senior Classes, whose circumstances require it, will receive \$100 a year from the income of Scholarships and other funds belonging to the School. Additional aid (the amount of which has generally been from \$75 to \$100 annually), is offered by

the American College and Education Society to its beneficiaries. These means of assistance cover all the expenses mentioned above.

Members of the Graduate or Fourth Year Class will be furnished with rooms free of rent, and no charge will be made for instruction or the use of Libraries.

The Scholarships belonging to the Department bear respectively the names of James Hillhouse, William Leffingwell, George E. Dunham, Normand Smith, E. E. Salisbury, Thomas R. Trowbridge, Charles Atwater, Richard Borden, Susan B. Dwight, Samuel Holmes, Charles Nichols, Noah Porter, John DeForest, James Dwight, J. B. Beadle, David Root, Rebecca Breed, Mary Goodman, Orin Fowler, Edward Bull, W. W. Seymour, William S. Eakin, Cassius Welles, and Robert McEwen.

After the close of the second year in May, students have opportunities to receive remuneration for preaching in the neighboring churches.

In general, it may be said that the aid which is provided for every young man, of any evangelical denomination, who gives promise of usefulness in the ministry, is sufficient, in connection with his own efforts, to enable him to complete a course of theological study.

GRADUATE FELLOWSHIPS

A GRADUATE SCHOLARSHIP OR FELLOWSHIP was established in this Department, in 1876, as a memorial of the late Mrs. Aurelia D. Hooker, of New Haven. It is assigned at graduation to that member of the class to which it is offered who, having been connected with the School through the entire course and being of approved Christian character, has in the judgment of the Faculty made such proficiency in theological studies as best to qualify him for the advantages offered by this foundation for the further prosecution of the same. The person to whom the scholarship is given receives the annual income (\$700) for two years after graduation, and is expected to pursue a course of theological study under the direction of

the Faculty, either as a resident at the School, or, in case he may prefer to do so, in Europe or Palestine. THE HOOKER FELLOWSHIP was offered to the class which entered the Divinity School in September, 1884, and is also offered to the class which entered in September, 1886.

A SIMILAR GRADUATE FELLOWSHIP yielding \$500, and affording to the student who shall receive the same privileges for one year after graduation, was offered on the same conditions, to the class which entered the School in September, 1885.

COMMENCEMENT OF THE TERM, VACATION, ETC.

The session for 1886-87 began on Thursday, September 23, and will continue till the third Wednesday in May, when the public anniversary is held. The annual examination of the classes and the meeting of the Alumni, are held in the same week. The next annual term will begin on Thursday, September 22, 1887.

By thus throwing all the vacations into one, the most favorable season of the year is secured for study, while the opportunity is given, in the four months' vacation, to engage in some form of benevolent labor, in connection with the mission efforts of the churches, or in the service of one of the benevolent societies, by which the practical experience required of the pastor, as well as pecuniary compensation, may be obtained. Should any students prefer to spend the vacation in theological reading, the Professors will counsel them in the choice of books.

Blank forms of application for admission may be obtained of the Secretary of the School, Professor George E. Day, New Haven, Conn., or from any of the other Professors.

DEPARTMENT OF MEDICINE

(YALE MEDICAL SCHOOL)

FACULTY

REV. TIMOTHY DWIGHT, PRESIDENT

MOSES C. WHITE, M.D., *Professor of Pathology*

CHARLES A. LINDSLEY, M.D., *Professor of Theory and Practice*

LEONARD J. SANFORD, M.D., *Professor of Anatomy*

WILLIAM H. CARMALT, M.D., *Professor of Surgery*

JAMES K. THACHER, M.D., *Professor of Physiology*

FRANK E. BECKWITH, M.D., *Professor of Clinical Gynecology*

JAMES CAMPBELL, M.D., *Professor of Obstetrics and Diseases of Women and Children*

THOMAS H. RUSSELL, M.D., *Professor of Materia Medica and Therapeutics*

SAMUEL W. WILLISTON, M.D., *Assistant Professor and Demonstrator of Anatomy*

HERBERT E. SMITH, M.D., *Professor of Chemistry, and Dean*

OTHER INSTRUCTORS

WILLIAM O. AYRES, M.D., *Lecturer on Nervous Diseases*

WILLIAM H. BREWER, *Lecturer on Sanitary Science and the Public Health*

HENRY P. STEARNS, M.D., *Lecturer on Insanity*

SAMUEL B. ST. JOHN, M.D., *Lecturer on Ophthalmology*

HENRY FLEISCHNER, M.D., *Lecturer on Dermatology and Clinical Medicine*

FRANK H. WHEELER, M.D., *Assistant in Pathology*

WILLIAM G. DAGGETT, M.D., *Lecturer on Bacteriology*

WILLIAM E. LOCKWOOD, M.D., *Assistant in Chemistry*

HENRY L. SWAIN, M.D., *Lecturer on Diseases of Throat and Ear*

THOMAS G. LEE, M.D., *Lecturer on Histology*

In the fall of 1810 a charter was granted to the President and Fellows of Yale College and the President and Fellows of the Connecticut Medical Society, authorizing them to unite according to the terms of certain "Articles of Union," before agreed upon, for the establishment of a

medical seminary, to be styled the Medical Institution of Yale College. Two years later the School was organized, and in the fall of 1813 instruction was begun. The Faculty consisted of four professors, appointed by the College Corporation from nominations by the Medical Society. Degrees were conferred by the College on the recommendation of the board of examiners, consisting of the members of the Faculty and an equal number appointed by the Medical Society. The instruction consisted of didactic and clinical lectures and dissections during the short winter course. Later, instruction was given during the spring months also, and from time to time the number of instructors was increased.

That this dual nature of the School and the method of instruction were wisely planned, is shown by the position which the School at once took in the medical instruction of the time. But changes were gradually taking place in the relations between practitioners and students of medicine, and even greater changes in medicine itself, which seemed to demand a different kind of instruction. This School early responded to this demand, and in 1879 an entrance examination was imposed and a graded course extending over three full years and including considerable laboratory instruction was adopted. In 1884, by an agreement with the Medical Society, the College authorities assumed the entire control of the School.

The methods of instruction now employed are similar to those in vogue in the other departments of the University, and consist of lectures, recitations, and laboratory work, in the various studies of the curriculum. The course is designed to impart to the student a thorough and practical knowledge of scientific medicine. The School has well equipped laboratories for the study of anatomy, histology, chemistry, physiology, and pathology, and the student spends much of his time in them during the first two years. In the second year he begins the practical branches of medicine, to which he devotes the third year. While the attention of the student is particularly directed

to those branches which can be studied to advantage only in a well equipped medical school, the value of clinical instruction is fully appreciated, and good facilities for illustrating the diagnosis and treatment of diseases are found in the various public medical services in the city. The details of the course of instruction are given below.

TERMS OF ADMISSION

Candidates for admission to the course leading to the degree of Doctor of Medicine, must be at least eighteen years old, and must present satisfactory testimonials of moral character from former instructors or physicians in good standing.

As evidence that he has had a sufficient preliminary education, each candidate must present proof that he has passed the matriculation examination of some scientific, literary, or professional college in good standing; or present testimonials from the proper officer that he has pursued the course at some high school, academy, or preparatory school, approved by the Faculty; or he must pass an examination in the following subjects:

1. MATHEMATICS; Algebra to Quadratics; Geometry, Euclid, two books or its equivalent; Metric system of Weights and Measures.
2. PHYSICS: Balfour Stewart's Elementary Physics, or some equivalent work.

These examinations are conducted in writing. Grammar, spelling, and construction are considered in judging of the papers. Copies of the questions of previous examinations will be furnished on application to the Dean.

These examinations will be held at the Medical School at 9 A. M., on the Wednesday preceding the opening of the first term, and on the Thursday following Commencement.

In conjunction with other Departments, examinations will be held on the Thursday after Commencement in Chicago, Cincinnati, and San Francisco. Particulars of

the time and place will be announced in the local papers. A fee of five dollars will be charged for admission to these examinations.

Students who have studied elsewhere, either in any recognized medical school, or under private preceptors of good standing, may present themselves for examination three weeks before Commencement, and enter the examinations of the first one or two years as they see fit. The results of the examinations will determine the class to which they belong.

Applicants for advanced standing who present themselves at other times of the year, will be assigned by the Dean to such class as they may from their representations seemed to be fitted for; but at the next annual examination, they will be examined as if appearing then for the first time.

TERMS AND VACATIONS

The regular exercises of the School consist of three terms, covering thirty-four weeks, exclusive of a vacation of three weeks at Christmas and a recess in the spring, usually of one week.

The first term begins with the first Thursday of October, and continues eleven weeks. The second term begins three weeks after the close of the first, and continues twelve weeks. The third term is eleven weeks in length, ending with Commencement. (See Calendar, p. 6.)

COURSE OF INSTRUCTION

JUNIOR YEAR:

Chemistry: Lectures and recitations, five times a week, Professor Smith. Chemical Laboratory, three times a week, Professor Smith.

Anatomy: Lectures and recitations, five times a week, Professors Sanford and Williston. Dissections, four times a week from November 1 to April 1, Professor Williston. Autopsies, Professor White.

Histology: Lectures and laboratory work, twice a week, Dr. Lee.

Physiology: Recitations, twice a week, Professor Thacher.

MIDDLE YEAR :

Anatomy: Lectures and recitations, five times a week, Professors Sanford and Williston. Dissections, four times a week from November 1 to April 1, Professor Williston.

Materia Medica and Therapeutics: Lectures and recitations, three times a week, Professor Russell.

Physiology: Lectures and recitations, twice a week, Professor Thacher.

Pathology: Lectures and recitations, once a week, Professor White. Laboratory work, once a week, Professor White and Dr. Wheeler. Autopsies, Professor White.

Medicine: Lectures and recitations on General Medicine, three times a week, Professor Lindsley. Medical Clinic, twice a week, Professors Lindsley and Thacher.

Surgery: Lectures on General Surgery, three times a week, Professor Carmalt. Surgical Clinic, once a week, Professor Carmalt.

Obstetrics and Diseases of Women and Children: Lectures and recitations, twice a week, Professor Campbell. Clinic for Diseases of Women, once a week, Professor Beckwith.

Dispensary Clinics, daily. Hospital Clinics. Operations at the Hospital.

SENIOR YEAR :

Pathology: Lectures and recitations, once a week, Professor White. Laboratory work, once a week, Professor White and Dr. Wheeler. Autopsies, Professor White. Bacteriology, once a week, second term, Dr. Daggett.

Medicine: Lectures on General Medicine, three times a week, Professor Lindsley. Medical Clinic, once a week, Professors Lindsley and Thacher. Lectures on Diseases of the Nervous System, once a week, Dr. Ayres. Lectures on Insanity, once a week, for nine weeks, Dr. Stearns. Clinical lectures on Dermatology, once a week, Dr. Fleischner. Sanitary Science, Professor Brewer, and Toxicology, Professor Smith, once a week, first term.

Surgery: Lectures on General Surgery, three times a week, Professor Carmalt. Surgical Clinic, once a week, Professor Carmalt. Lectures on Ophthalmology, once a week, Dr. St. John. Ear and Throat Clinic, once a week, Dr. Swain.

Obstetrics and Diseases of Women and Children: Lectures and recitations, twice a week, Professor Campbell. Clinic for Diseases of Women, Professor Beckwith.

Dispensary Clinics, daily. Hospital Clinics, weekly. Operations at the Hospital.

CHEMISTRY—In the course of lectures and recitations on general chemistry, an attempt is made to familiarize the student with the

theories of the science; considerable time is therefore spent in writing equations of reactions, and in solving chemical problems. The general properties of the elements and the more important facts concerning them and their compounds are, however, fully illustrated by experiments and by the use of a large collection. To the study of the compounds of carbon is devoted nearly one-half of the time, the theories as to the constitution of these important bodies being illustrated by the preparation of many of the typical compounds before the class.

Qualitative analysis is pursued so far as to require each student to analyze a mixture of salts of the more common metals. The course is systematic, and is intended to cultivate habits of observation and the analytical method of thought. The elements of quantitative analysis are taught, the methods being for the most part the rapid volumetric ones.

During the second and third terms two of the lecture hours of each week and most of the laboratory exercises are devoted to physiological chemistry. The course consists of a study of the chemical composition and reactions of the various organs and secretions, particular attention being paid to the processes of digestion and to the action of ferments. The study of normal urine is supplemented by abundant practice in the chemical and microscopical examination of pathological specimens.

ANATOMY—The instruction in anatomy aims at thoroughness and comprehensiveness by means of lectures, recitations, and dissections. The lectures are fully illustrated, and the topics thus presented are reviewed and supplemented by frequent recitations, accurately fixing the knowledge of the student. Practical work in the dissecting room, under the careful supervision of the Demonstrator, is required of each student. The room for this purpose is under the superintendence of the Professor and Demonstrator, and is provided with all necessary material and appliances. From the thorough methods employed in the preservation of material there is little or no danger to health from dissection wounds. During the early part of the course material for study of the bones, ligaments, and joints, is provided for the first-year students, under the direction and instruction of the Demonstrator. Practical work on the skeleton and cadaver is supplemented by a course of lectures on topographical anatomy, by the Professor, with demonstrations and examinations upon the living subject.

Normal Histology—The course in histology consists of lectures, recitations, and practical work with the microscope in the laboratory.

The student receives a number of specimens of each tissue and organ of the body, which are carefully prepared for him in various ways, so as fully to illustrate the different points of structure, of which he makes drawings. In addition to this each one receives practical instruction in injecting, hardening, cutting and preserving tissues and specimens after the most approved methods.

Lectures illustrated with the lantern are a special feature of the instruction, the transparencies being made from photographs of typical preparations and diagrams.

A large reference collection, abundant material, and the most recent instruments and publications, afford good facilities for advanced work.

PHYSIOLOGY—The design of the regular course of instruction in this branch may be described as essentially the impression of modern physiology on the mind of the student, on the lines and methods, and according to the measure of Dr. Foster's excellent presentation in his manual. For this purpose full experimental illustrations are given, and such other demonstrations as are of service in making the knowledge real and lasting. In the experiments the students are employed in turn as assistants, and thus acquire both an intimate knowledge of the subject and a manual skill which will be of service to them in their professional work. Informal recitations are regularly held with the design of affording the student an opportunity of asking questions, as well as of marking out for him a regular amount of private daily study.

Care is taken to call attention to the relations of physiological facts, as they present themselves, to practical medicine.

Students desirous of investigating some particular subject in experimental physiology will be taken into the physiological laboratory without extra charge, furnished with the requisite apparatus, and directed in their work.

MATERIA MEDICA AND THERAPEUTICS—The instruction in this department is given by recitations chiefly. These are illustrated by the specimens from a large collection of the materia medica, though the botany, physical character and chemical composition of drugs, receive much less attention than their physiological actions and therapeutical uses; the lectures are devoted more particularly to the elucidation of the latter subjects. A reasonable portion of time is devoted to exercises in prescription writing, in both the metric and English systems. The students are required to prescribe for a large variety of hypothetical cases, calling for the administration of most of the drugs of the materia medica.

PATHOLOGY is taught by lectures and recitations, and by practical work with the microscope in pathological histology. In this course students are taught to prepare and preserve microscopic specimens of morbid tissues.

Pathological anatomy is illustrated by a large collection of specimens and drawings, with which the museum is supplied, and supplemented by fresh pathological specimens. Students are also expected to attend all the autopsies made at the Morgue of the New Haven Hospital. This large and convenient morgue was constructed with special reference to rendering autopsies available for the instruction of students.

Bacteriology—The School has a well equipped laboratory for the study of bacteriology. The instruction in this subject consists of a course of lectures, in which the modern methods of isolating and identifying bacteria are fully demonstrated.

THEORY AND PRACTICE OF MEDICINE—The method so long in vogue in medical schools of teaching this important branch solely by didactic lectures, has for a few years past been superseded by a method combining lectures and recitations in the same exercise. It is the experience of this School that the latter method has been attended with much more satisfactory results. By this mode of instruction the student is not only informed of the special subject upon which he is to be taught, but he is required to prepare himself from a text-book. During the recitations questions upon the subject are encouraged, and thus the Professor has the best opportunity to explain such obscure points as he may find are not fully appreciated. The intent and aim of the teaching is to give the instruction a practical direction, the teacher being constantly mindful of the real needs of the student.

In the medical clinics, the students of the Senior class are permitted to make examinations of patients, and having made their diagnosis to suggest remedies, subject to the approval or correction of the teacher.

Two general medical clinics are held weekly at the School by Professors Lindsley and Thacher, and are attended by a variety of general medical and nervous cases.

During the second and third terms two clinics are given each week by Professor Thacher and Dr. Fleischner at the New Haven Hospital; these are general medical clinics, but particular attention is given in them to the demonstration of the various signs of importance in physical diagnosis.

In addition to these, which are regular college exercises, occasional clinics are held at the Hospital by Professor White and Dr. Gilbert, and the students are admitted to the clinics of the New Haven Dispensary.

Instruction is given on special topics in medicine, as follows:—

General Nervous Diseases, a course of didactic lectures by Dr. Ayres.

Mental Diseases, a course of didactic lectures by Dr. Stearns, and visits to hospitals for the insane.

Dermatology, a course of clinical lectures in the Dispensary by Dr. Fleischner.

Sanitary Science and Public Health, a course of lectures by Professor Brewer, including the elements of these subjects, with a discussion of methods in practice, and of public sanitary administration.

Toxicology, a course of experimental lectures by Professor Smith, including a discussion of the general subject matter of the science, and the statistics of the common poisons.

SURGERY—Three didactic lectures to the Senior and Middle classes are given weekly, on the principles and practice of surgery, the course

running through two years. Illustrations of minor surgical practice are shown in the service of the New Haven Dispensary, by Professor Carmalt, who has charge of the surgical division. The wards of the New Haven Hospital afford opportunities for the observation and study of the more severe injuries and important surgical diseases. Professors Carmalt and Russell are of the visiting staff; they hold weekly clinics during their terms of service, and the advanced students are shown the cases during their whole stay in the Hospital, studying the causes which necessitate operations, where such are necessary, seeing the operations, among which are many of the most important in surgery, and observing the results of treatment.

Ophthalmology is taught in a special course of lectures by Dr. S. B. St. John, of Hartford, and illustrated by a large number of cases in the surgical clinic, particular attention being given to their elucidation.

Otology and Laryngology are taught by Dr. Swain in the School clinics. Each student is required to make examinations with instruments, and becomes familiar with their use and with the normal and principal pathological conditions of the throat and ear.

OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN — Instruction is given in obstetrics by lectures and recitations, with practical demonstration of the operations of midwifery.

Gynecology is taught by lectures, recitations, and clinics. The Senior class receive instruction from Professor Beckwith at the bed-side in the Hospital.

Diseases of Children. This important branch of medicine is taught by didactic lectures and recitations, as well as by clinical instruction at the Dispensary and Hospital.

THE NEW HAVEN HOSPITAL is situated but a short distance from the School building, and being the only hospital in a city of eighty thousand inhabitants, its wards constantly afford ample material for the illustration of disease, and furnish frequent occasion for the performance of the various surgical operations. Three Resident Physicians are appointed annually according to the result of an examination before the medical staff. Graduates of this School frequently obtain appointments also in the hospitals of neighboring cities.

THE NEW HAVEN DISPENSARY is located on the School grounds, and is visited by several thousand patients annually. Its service affords a large variety of medical cases, and minor surgical ills.

EXAMINATIONS are held at the close of each year on the studies of the year. The examinations at the end of the first year are upon Chemistry, Histology, and Elementary Physiology.

Those at the end of the second year are upon Advanced Physiology, Anatomy, Materia Medica and Therapeutics.

Those at the end of the third year are upon Pathology, Surgery, Medicine, and Obstetrics.

REQUIREMENTS FOR A DEGREE

Every candidate must be twenty-one years of age, and of good moral character; he must have pursued medical studies for three years, two of which must have been in a recognized medical college, and the last of which must have been at this School; he must have passed the required examination in all the studies of the three years' course.

PRIZES

THE KEESE PRIZE—The income of the fund for the Keese Prize, a memorial of Hobart Keese, M.D., of the class of 1855, which amounts to about \$145 annually, is awarded by the Faculty to that member of the graduating class who presents the best thesis. If among the theses offered, none are of sufficient merit, the prize may be withheld. The theses must be presented to the Dean on the second Saturday before Commencement.

PRIZE IN OBSTETRICS—A prize, consisting of a set of obstetrical instruments, will be awarded by Professor Campbell to that member of the graduating class who passes the best examination in obstetrics.

LIBRARY

The students of this department can obtain from the Dean tickets admitting them to the free use of the University Library, which contains over 130,000 volumes and includes the Medical Library.

GYMNASIUM

The privileges of the College Gymnasium can be had on payment of a small fee.

FEES AND EXPENSES

Matriculation Fee (paid upon entering the School), . . \$	5.00
Tuition Fee, for one year,	125.00
Graduation Fee,	30.00

Of the tuition fee for the year, \$45 is due at the beginning of the first term, \$45 at the beginning of the second term, and \$35 at the beginning of the third term. Members of the Senior class who have attended and paid for two full years are entitled to attend the third year at three-fifths the above rates. Fees are paid to the Treasurer of the University, except the graduation fee, which is paid to the Dean.

There are no extra expenses, except the actual cost of breakage in the Chemical Laboratory, which should not exceed \$5, and the cost of anatomical material.

BOND—Students who do not pay in advance are required to give a bond to the Treasurer for three hundred dollars, executed by a satisfactory bondsman; a blank for this bond will be furnished on application to the Treasurer. Those who deposit such bonds will receive term bills, with interest added, shortly before the end of each term, to be paid on or before the commencement of the next succeeding term, and students who deposit bonds must pay all arrearages before they can receive back their bonds from the Treasurer. No degree can be conferred until all term bills are discharged.

Students will be assisted in finding board and lodging by the Janitor. Prices range from four and a half dollars a week upwards.

INSTRUCTION TO GRADUATE AND SPECIAL STUDENTS
NOT CANDIDATES FOR A DEGREE IN MEDICINE

The instruction here offered to graduates in medicine is intended to meet the requirements of two classes of students: first, those who wish to review or supplement their knowledge of the regular studies of the medical curriculum, as taught in this School; and second, those who wish

to fit themselves in special lines of medical work, as for the duties of a medical examiner, or for medico-legal and sanitary examinations.

Any of the regular courses may be taken, and special courses to meet the requirements of the student may be arranged at hours convenient to the instructors.

Special students are not taken in the practical branches of medicine, but the general studies of the course are open to such persons as may desire to pursue them, if by their previous studies they are prepared to profit by the opportunity.

The charges for instruction will depend on the courses taken, and can be ascertained for any particular line of study by applying to the Dean.

For further information, address Professor HERBERT E. SMITH, Dean. Office hours, from 11:30 A. M. to 12:30 P. M. on Wednesdays, at the School, 150 York st.

DEPARTMENT OF LAW

(YALE LAW SCHOOL)

FACULTY

- REV. TIMOTHY DWIGHT, PRESIDENT
- HON. FRANCIS WAYLAND, LL.D., *Dean, and Professor of the Law of Evidence*
- HON. WILLIAM C. ROBINSON, LL.D., *Professor of Elementary and Criminal Law and the Law of Real Property*
- SIMEON E. BALDWIN, M.A., *Professor of Constitutional and Mercantile Law, Corporations, and Wills*
- JOHNSON T. PLATT, M.A., *Professor of General Jurisprudence, Torts, and Equity*
- WILLIAM K. TOWNSEND, D.C.L., *Professor of Contracts and Admiralty Jurisprudence*
- THEODORE S. WOOLSEY, LL.B., *Professor of International Law*
-

SPECIAL LECTURERS AND INSTRUCTORS

IN THE UNDERGRADUATE COURSE

- HON. EDWARD J. PHELPS, LL.D., *Instructor in Evidence*
- MARK BAILEY, M.A., *Instructor in Forensic Elocution*
- HON. MORRIS W. SEYMOUR, M.A., *Lecturer on Corporations*
- M. DWIGHT COLLIER, M.A., *Lecturer on Attachments, Judgments, and Executions*
- HON. WILLIAM E. SIMONDS, LL.B., *Lecturer on Patent Law*

IN THE GRADUATE COURSE

- ALBERT S. WHEELER, M.A., *Instructor in Roman Law*
- ARTHUR M. WHEELER, B.A., *Instructor in English Constitutional History*
- WILLIAM G. SUMNER, LL.D., *Instructor in Political and Social Science*
- ARTHUR T. HADLEY, B.A., *Instructor in Railway Management, and Economics of Transportation*
-

JOHN A. ROBINSON, LL.B., M.D., *Librarian*

It is the aim of the Law School to give to all its students a thorough acquaintance with the general principles and rules of American law, so as to fit them for the Bar of any State; and to offer also to advanced students, who are able to devote to it the necessary time, instruction in all that belongs to law as a science in the widest sense.

The methods of legal education have changed so greatly of late, that this Department of the University, though established in 1824, has taken on a new character within the last fifteen years. Instruction is now given in an undergraduate course, a graduate course, and two special courses.

The undergraduate course is mainly devoted to the practical side of legal education, but also gives some introduction to the general ideas and sources of jurisprudence. In the graduate course the studies are so arranged that those of the first year have no necessary connection with those of the next, and can therefore be profitably pursued by themselves when the student has no time to devote to a more extended education. The first year is mainly occupied with further instruction in the practical topics begun in the undergraduate course, such as Corporations, Railroad Law, Patents, Code Pleading, and Practice in the United States Courts. The second year is mainly devoted to studies of a more scientific and philosophical character, including General and Comparative Jurisprudence, Legislation and Government, Roman Law, the French Codes, Private International Law, etc. It is believed that the studies of the undergraduate course, and of the first year of the graduate course, cover all the topics which it is desirable for the ordinary law student to examine, before his admission to the Bar, and the fourth year (in which the degree of Doctor of Civil Law is awarded) is only recommended to those who desire to fit themselves to be something more than practicing lawyers. The special courses are described on page 145.

The Law School occupies an entire story of the Court House of New Haven County, facing the Green, on the opposite side from the older College buildings. It has,

upon the same floor, two lecture-rooms, a large library hall, the office of the Dean of the Faculty, and other apartments furnishing every needed convenience for quiz-clubs and debating societies. A special feature of the school is the peculiar facility which it affords its students for observing actual practice in court. This is due to the fact that in the Court House above-mentioned two terms of the Supreme Court of Errors of Connecticut are held annually; and the Superior Court and Court of Common Pleas, the principal Civil and Criminal Courts of the State, are also in session almost daily, during each of the Law School terms.

The students are allowed the freest access to the large library of the School, examining the books on the shelves for themselves, without the intervention of the librarian. The familiarity with the reports and authorities that is thus gained, the Faculty deem of great importance in accustoming the student to prepare his cases intelligently and thoroughly in his future practice. A debating society—the Kent Club—gives a good opportunity for practice in public speaking, and the formation of class quiz clubs, to meet in the Law School apartments, is also encouraged. The discussion of legal topics, unreservedly and familiarly by the students among themselves, is promoted, and the fact that they generally come from a wide range of States renders such comparisons of ideas of special interest and value to all. The share of the School in the general advantages of the University gives the students many opportunities of broadening their views and acquiring knowledge in regard to matters outside of their strictly professional work. They can, on application to the Dean, obtain permission to be present at one or more of the special courses of graduate instruction in the Department of Philosophy and the Arts, or the lectures on Medical Jurisprudence, Anatomy, Insanity, etc., in the Medical School, on payment of a moderate fee.

The College Gymnasium is open to members of the Law School on payment of moderate fees.

COURSES OF INSTRUCTION

The regular courses of instruction are as follows:

UNDERGRADUATE COURSE

JUNIOR YEAR :

Professor WAYLAND: Recitations—Evidence. Lectures—English Constitutional Law.

Professor ROBINSON: Recitations—Elementary Law, Pleading.

Professor BALDWIN: Recitations—Mercantile Law. Lectures—Nature and History of American Law, Wills.

Professor PLATT: Recitations—General Jurisprudence, Torts. Lectures—Jurisprudence.

Professor TOWNSEND: Recitations—Contracts.

Professor WOOLSEY: Recitations—International Law.

Mr. BAILEY: Lectures—Forensic Elocution.

SENIOR YEAR :

Professor ROBINSON: Recitations—Real Property, Criminal Law. Lectures—Estates, Conveyancing, Forensic Oratory.

Professor BALDWIN: Recitations—Mercantile Law, Corporations. Lectures—American Constitutional Law, Public Corporations, Roman Law, Practice.

Professor PLATT: Recitations—Equity.

Professor TOWNSEND: Recitations—Contracts.

Professor WOOLSEY: Lectures—International Law.

Mr. SEYMOUR: Lectures—Private Corporations.

Mr. SIMONDS: Lectures—Patents.

Mr. COLLIER: Lectures—Attachments, Judgments, and Executions.

GRADUATE COURSE

FIRST YEAR :

Professor ROBINSON: Recitations—Patents.

Professor BALDWIN: Recitations—Railroad Law, Practice in U. S. Courts. Lectures—American Constitutional Law.

Professor PLATT: Recitations—Municipal Corporations, Practice under systems of Code Pleading.

Professor TOWNSEND: Recitations—Admiralty Law.

Professor WOOLSEY: Lectures—International Law.

Professor SUMNER: Lectures—Political History and Science.

Professor A. M. WHEELER: Lectures—English Constitutional History.

Professor HADLEY: Lectures—Railway management.

SECOND YEAR :

Professor ROBINSON : Lectures—Canon Law.

Professor BALDWIN : Recitations—Comparative Jurisprudence, Code Napoléon, Conflict of Laws.

Professor PLATT : Recitations—General Jurisprudence.

Professor SUMNER : Lectures—Political and Social Science.

Mr. A. S. WHEELER : Recitations—Roman Law.

Professor HADLEY : Lectures—Economics of Transportation.

The method of instruction, as will be seen by the foregoing schedule, is mainly that of recitations. It is the conviction of the Faculty of this Department, as well as the tradition of the University, that definite and permanent impressions concerning the principles and rules of any abstract science are best acquired by the study of standard text-books in private, followed by the examinations and explanations of the recitation room. Hence, although certain subjects are separately taught by lectures, either because the want of proper manuals, or the constant and rapid advance of learning, or economy of time, requires the adoption of that method, care is taken that the same topics shall be covered by recitation work in connection with the wider branches of the law to which they belong. The recitation hours, however, are not devoted entirely to the questioning of the student. While this is done with sufficient thoroughness to hold him up to his work of preparation, ample opportunity is afforded for a free colloquial discussion of the subject of the lesson and for the presentation and solution of the difficulties which he may have encountered in his private study. In this manner each student is brought into personal communication with the instructor in reference to his daily work, and as far as practicable receives the benefits which would be obtained if he were placed under the individual tutorship of his professor.

The several courses of study to which the attention of the student is directed in his undergraduate career are intended to familiarize him with all the branches of the law, which ordinarily become useful to the practitioner in the earlier years of his professional life. The course embracing Jurisprudence, American Law, English and American Constitutional Law, and Elementary Law, is pursued under the guidance of four different professors. In this course the fundamental conceptions which underlie all systems of jurisprudence are brought to the notice of the student and fully defined and explained; the peculiar doctrines which characterize our American Law are pointed out; the principles of constitutional government, and the special features it exhibits both in this country and in England, are discussed; and the entire body of the common law in its four great divisions, is reduced to clear and distinct propositions and illustrated by numerous collateral

readings. This course alone covers the ground usually traversed by the student in an office prior to his admission to the bar.

The course in Real Property includes recitations in a standard work of a general character, and, subsequently, in text-books upon special subjects, such as the law of Mortgages, the law of Landlord and Tenant, etc. Collateral to this course are two others: one, a series of lectures on Estates, in which the law and practice in Guardianships of Infants and Incapables, and in the Administration of Decedents' Estates, are considered; the other, a course of practical instruction in Conveyancing, in which the students are exercised in drawing all the instruments commonly employed in the transaction of business concerning real property.

The course on Contracts is the most extended, as it is the most important, in the School. It occupies a greater part of the time of two of the professors. It continues during both the Junior and Senior years, and embraces, among other important topics, those of Agency, Bailments, Bankruptcy and Insolvency, Bills and Notes, Consideration and Assent, Contract Liabilities of Infants and Married Women, Liens, Marine, Fire and Life Insurance, Partnership, Sales, Shipping, Sureties, Trademarks, and Telegraphs. In addition to the text-books used in this course, the leading cases, decided since the text-book was written, are referred to, thus bringing the law on each point down to the date of instruction. Collateral to this course are five others: one on Wills, in which the law of testamentary dispositions and executorship is examined; another on Patents, in which the nature of patentable inventions, the mode of issuing letters patent, and the remedies for infringement are considered; a third on Corporations in general, treating the law governing the organization, privileges, duties, and liabilities of all incorporated bodies; the fourth and fifth on Private and Public Corporations respectively, in which the practical arrangement of bodies politic of both classes is illustrated and explained.

The course on Torts consists of recitations on that subject, from recent and approved text-books, with a running commentary by the instructor, explaining and applying the principles contained in the lesson.

The course on Equity embraces the whole body of Equity Jurisprudence, and is taught by recitations from the text-book, with occasional lectures on the obscurer topics. Collateral to this course is a series of lectures on Equity Pleading, discussing the principles and practice by which equitable remedies are governed and applied.

The course on Criminal Law extends throughout the Senior year, covering the entire matter contained in the exhaustive treatises now accessible, and embracing the topics of Procedure and Evidence as well as the substantive law of Crimes. Current cases of note, arising in any part of the country, are made subjects of discussion in connection with the rules of law by which they are to be decided.

The course on Pleading embraces the subjects of Common Law

Pleading and Code Pleading, both taught by recitations and examples, while the details of the latter are enforced by requiring the students to draw complaints, answers, etc., in cases of their own selection, and to submit them to the instructors for criticism and correction.

The course on Evidence covers the matter contained in the first and second volumes of Greenleaf on Evidence: the subjects in the first volume being taught by recitation from the text-book; those in the second, by lectures amplifying and explaining, in the light of modern cases, the principles involved in the various topics. Collateral to this and the foregoing course are four others: one on Forensic Oratory, consisting of a series of lectures, in which the preparation and conduct of a suit, in all its different stages, are explained; the second, on Forensic Elocution, in which practical instruction is given in the art of public and forensic speaking; the third on Process, including the subjects of Attachments, Garnishment and Execution; and the fourth on Practice, a series of familiar lectures on the methods of transacting general legal business.

The course on International Law occupies portions of both undergraduate years. In the Junior year the work consists of recitations covering the field occupied by Woolsey and Pomeroy on International Law. In the Senior year, instruction is given by lectures on particular topics, especially on questions which are, for the time being, exciting public attention, and which demand the application of the principles examined in the previous year.

The course on Roman Law is intended as an introduction to the more advanced studies of the Graduate years, and, though necessarily brief, is sufficient to communicate to the student an accurate knowledge of the distinguishing features and doctrines of the civil law, and to refer him to the original sources for more detailed information.

The studies of the first Graduate year have been selected with a view of preparing the intended practitioner for the higher walks of professional life. The subjects are of universal interest, the law which governs them is substantially the same in all parts of the country, they involve the most extensive financial enterprises of the age, and on these accounts form the most important practical topics at present embraced within our law. Particular attention to them has, therefore, been deemed an essential requisite to a finished legal education, and the devotion to them of an additional year, on the part of students and instructors, has been thought a wise if not a necessary measure. The various courses are critically taught both by text-book and by lecture, and each student receives all the assistance he desires in his personal examination of cases and authorities. Special attention is paid to the methods of practice and pleading in the United States Courts, both in common law, equity, and admiralty cases, and instruction is therefore given on these subjects by three of the Faculty. The students are required to draft

pleadings, and in matters of special difficulty, such as the conduct of proceedings *in rem* in admiralty, these pleadings are carried on through all the usual steps, and the issues made up are argued before the Professor. They are also made familiar with the leading cases on these points in the United States Supreme, Circuit and District Courts. The value of this year of special work to the earnest and intelligent graduate cannot be overestimated.

The courses of instruction in the second Graduate year are designed to afford to the advanced student an opportunity to round out his legal acquirements with a knowledge of the more profound and philosophical principles of human law. The primary conceptions to which he was introduced at the commencement of his studies are again taken up and developed in a scientific method, and examined in the light of various systems of practical jurisprudence now or heretofore prevailing. In view of the limited time which can ordinarily be devoted by young men to these pursuits, the courses have been so arranged as to present these fundamental ideas as clearly and in as many applications as is possible, leaving it to future private study to enlarge the outline and complete the details of the work.

The course on General Jurisprudence consists of lectures and recitations from such works as Austin on Jurisprudence, Holmes on the Common Law, etc., and the students are required to write theses on the various topics. The course on Roman Law comprises the careful study of the Institutes of Justinian, in connection with institutional works of modern authors, and the perusal of selected titles from the Digest, accompanied by oral explanation. Particular attention is devoted to this course of study, and every effort is put forth to make the students familiar with the doctrines of the civil law, as well as with the technical language in which these have been expressed. The course on Comparative Jurisprudence includes among its chief branches a careful study of the French Codes, compared with other systems of jurisprudence, particularly the Roman, English, and American, and recitations upon private international and inter-state law, with the investigation of leading cases on these subjects, decided in the French and American courts. The course on Canon Law consists of a series of lectures on the history, development, and fundamental theories of the Canon law, with select readings from the *Corpus Juris Canonici*, and from French and English treatises upon the subject. The course on Political and Social Science is one of the principal courses in the Philosophical Department of the University (see page 98), and is attended by the Graduate students of the Law School in common with the members of that Department. The course on the Economics of Transportation is a continuation of the series of Lectures on Railway Management given in the first graduate year, extending the view of the student from the single subject of railways to all the instrumentalities of commerce.

In addition to the regular courses of instruction, two Special Courses are provided: one for those who desire some acquaintance with law as a preparation for business life; the other for persons not intending any active business or professional career, but desiring to acquire an enlarged acquaintance with our political and legal systems and the rules by which they are governed. The first of these special courses covers a single year; the second comprises two years. The studies of the first course are arranged as follows:

FIRST SPECIAL COURSE—ONE YEAR

Professor ROBINSON: Recitations—Elementary Law. Lectures—Estates.

Professor BALDWIN: Recitations—Agency, Partnership, Corporations, Bills and Notes, Bankruptcy and Insolvency. Lectures—American Law, American Constitutional Law.

Professor PLATT: Recitations—General Jurisprudence, Torts.

Professor TOWNSEND: Recitations—Marriage, and Husband and Wife, Sales, Shipping, Insurance, Sureties, Bailments, Telegraphs, Trademarks, Liens.

Professor WOOLSEY: Recitations—International Law.

Professor HADLEY: Lectures—Industrial Legislation.

Mr. BAILEY: Lectures—Elocution.

Mr. COLLIER: Lectures—Attachments, Judgments, and Executions.

SECOND SPECIAL COURSE—TWO YEARS

FIRST YEAR

Professor ROBINSON: Recitations—Elementary Law. Lectures—Estates.

Professor BALDWIN: Recitations—Bankruptcy and Insolvency. Lectures—American Law, American Constitutional Law, Roman Law.

Professor PLATT: Recitations—General Jurisprudence.

Professor TOWNSEND: Recitations—Sales, Insurance.

Professor WOOLSEY: Lectures—International Law.

Professor SUMNER: Lectures—Political and Social Science.

Professor FARNAM: Lectures—Public Finance.

Professor HADLEY: Lectures—Industrial Legislation.

Mr. BAILEY: Elocution.

Mr. SEYMOUR: Lectures—Private Corporations.

Mr. WHITE: Lectures—Local Government in the United States.

SECOND YEAR

Professor BALDWIN: Recitations—Private International Law.

Professor PLATT: Recitations — Municipal Corporations, General Jurisprudence.

Professor WOOLSEY: Lectures—International Law.

Professor SUMNER: Lectures—Political and Social Science.

Mr. WHEELER: Recitations—Roman Law.

In the latter course the students may, at their option, defer some of the studies of the first year until the second, and when desired, other branches taught in the Law School may be pursued, instead of certain of those here mentioned, at the discretion of the Faculty. Some or all of the studies of this course may be taken by those who, having received a bachelor's degree implying a course of undergraduate study equivalent to that pursued in the Academical Department, are completing their education with a view of applying for the degree of Doctor of Philosophy (see page 96).

Besides these various exercises, the undergraduate students are required, from time to time, to draft contracts, wills, and other similar instruments; the work of each being reviewed and commented upon, either in public or in private, by the instructor. Moot Courts are regularly held, at which one of the professors presides as judge; and the students acting as counsel, in the argument of cases, are required to draw the necessary pleadings, according to the common law or equity forms, as the case may be. Occasionally, also, cases are tried by the students before a jury of their own number, in a court regularly organized, with a full complement of judicial, clerical, and executive officers, where the proceedings are conducted in the same manner as in ordinary courts of law.

TERMS AND VACATIONS

There are three terms in each year: the Fall Term, beginning thirteen weeks from the day after Commencement, and continuing to the Thursday before Christmas; the Winter Term, beginning in January, after a vacation of three weeks, and lasting eleven weeks; and the Spring Term, beginning after a vacation of two weeks, and continuing until Commencement.

REQUIREMENTS FOR ADMISSION

UNDERGRADUATE COURSE

Applicants for admission to the Junior Class must be at least eighteen years of age, and must produce certificates of good moral character. Students who have not taken a degree from some collegiate institution will not be admitted as candidates for the degree of LL.B., until they have passed satisfactory examinations on the outlines of the History of England (Green's History of the English People is recommended), and of the United States, and on the text of the Constitution of the United States. Those, however, will be excused from this examination who present a certificate that they have passed a "Regents' Examination for Law Students," conducted under the authority of the Board of Regents of the University of the State of New York.

To entitle a person to admission to advanced standing as a member of the Senior class, he must be at least nineteen years of age; must, if a College graduate, have studied law under a competent instructor, or at the Law School of some College or University, for at least one year; must, if not a College graduate, have studied law under a competent instructor for at least two years, or at a Law School for at least one year; and must pass such examinations as are required for those entering the Senior Class in the regular course, at which it will be sufficient if he is prepared to be questioned on Parsons on Contracts (excepting only from vol. ii, pages 257 to 488, and from vol. iii, pages 350 to 423 and 525 to 557); Blackstone's Commentaries (except Book 4), Robinson's Elementary Law, Heard on Pleading, Townsend's Notes on Code Pleading, Greenleaf on Evidence, vol. i, Cooley on Torts, and the elementary principles of testamentary law, as given in such works as Hawkins on the Construction of Wills. Those not College graduates must also pass the preliminary English entrance examination, or produce a "Law Student's Certificate," from the Regents of the Uni-

versity of the State of New York. Attorneys at law, however, of any State are entitled to admission to the Senior Class, without examination, on the exhibition of their certificates of admission to the bar; and special students, not candidates for a degree, will be admitted to any of the exercises of the school without examination.

GRADUATE COURSE

The first year of the graduate course is open without examination, to graduates from any Law School, having the degree of LL.B.

The last year is open only to those who have successfully completed the studies of the preceding year, and received the degree of Master of Law (M.L.) A preliminary examination upon the outlines of Roman Law and Roman History must also be passed, by all who have not taken their Bachelor's degree at some Law School where Roman Law is a prescribed study. The degree of Doctor of Civil Law (D.C.L.) may be applied for at the end of this year, by those who have been graduated at some collegiate institution as Bachelor of Arts or Philosophy; or who are graduates of the Yale Law School, and attained a prescribed standard of scholarship on their examinations both for the degree of LL.B. and of M.L. A good knowledge of either the French or German language, as well as of Latin, is also required. The Faculty will present no one for the degree of D.C.L., who has not attained a high standard of proficiency in the studies pursued.

EXAMINATIONS

There will be an examination of candidates for admission to the Junior Class immediately after the opening of the Fall Term. Candidates for admission to the Senior Class are examined at the end of the Spring Term, or beginning of the Fall Term. Seniors are examined for a degree, only at the close of the Spring Term. In the undergraduate course there are certain studies upon which

all students are examined at the close of the year, and others upon which only those who desire, are examined. The award of "honors" is confined to those who pass both examinations. The Junior "pass" examination includes the studies of the year in Elementary Law, Contracts, Pleading, Evidence, Torts, and Wills. The Junior "honor" examination includes the studies of the year in Jurisprudence and International Law, and such other branches as the Faculty may from time to time prescribe. The Senior "pass" examination includes the studies of the year in Contracts, Real Property, Criminal Law, Equity, American Constitutional Law, Patents, Public and Private Corporations, and Estates. The Senior "honor" examination includes the studies of the year in International Law, Roman Law, and such other branches as the Faculty may from time to time prescribe. Examinations for degrees in the graduate course are held at the close of the Spring Term. Every candidate for a degree, both in the undergraduate and graduate courses, must also submit a written thesis on a given legal topic, which must be approved by the Faculty.

LIBRARY, PRIZES, ETC.

The special Library of the Department, which has a permanent endowment for its support (the English Fund, established by the Hon. James E. English, M.A., in 1873), contains over eight thousand volumes, and is open daily during term time. It contains all the reports of Great Britain and America, with an extensive collection of textbooks and the leading legal periodicals. The students can also draw books from the general University libraries, containing over 150,000 volumes.

The following prizes are open to competition :

The TOWNSEND PRIZE (established by the Hon. James M. Townsend, in 1874), of \$100, to that member of the Senior Class who shall write and pronounce the best oration or thesis at the public anniversary exercises on graduation.

The JEWELL PRIZE (established by the Hon. Marshall Jewell, M.A., in 1871), of \$50, to that member of the Senior Class who receives the highest marks at the final examination of his class, at their graduation.

The BETTS PRIZE (established by Frederic H. Betts, M.A., in 1875), of \$50, to that member of the Junior Class who receives the highest marks at his annual examination.

The O. S. SEYMOUR PRIZE (established by the family of the late Hon. Origen S. Seymour, LL.D., in 1885), of \$60, to that member of the graduating class who, in the opinion of the Faculty, has made the greatest improvement in scholarship during both years of his course.

DEGREES

In the undergraduate course the degree of Bachelor of Laws is conferred by the Corporation; upon the recommendation of the Faculty of the Department, based on a satisfactory "pass" examination and the submission of a satisfactory thesis, on the following persons :

1st. Attorneys at Law, who have been members of the Department for one year after their admission to the Bar.

2d. Any students who have been members of the Department for not less than two years, and who passed satisfactorily the Junior "pass" examination at the end of their first year.

3d. Students who have been admitted to advanced standing as members of the Senior Class, and have remained in that Class for not less than one year.

The examination for the degree is mainly in writing, and is conducted under the supervision of an examining committee, appointed by the Superior Court, and the successful candidates, if twenty-one years of age, may be thereupon admitted to the Connecticut Bar. An oral examination is also had, upon one or two studies, before members of the Bar from different States, appointed for the purpose. In the graduate course the degrees of Master of Laws (M.L.) and Doctor of Civil Law (D.C.L.) are conferred under the conditions before specified.

Degrees are awarded, in cases of students of unusual merit, *cum laude*, *magna cum laude*, or *summa cum laude*.

EXPENSES

The fees for tuition and use of the library in the undergraduate and first special courses are \$45 for the Fall Term, \$35 for the Winter Term, and \$35 for the Spring Term, or \$100 for the entire year; and in the graduate and second special courses, for the first year, \$50 for the Fall Term, \$40 for the Winter Term, and \$40 for the Spring Term, or \$125 for the whole year; and for the second year, \$80 for the Fall Term, \$70 for the Winter Term, and \$70 for the Spring Term, or \$200 for the whole year; to be paid to the Treasurer of the University in advance, or secured by a bond with surety to his satisfaction. Where payment is not made in advance, interest will be added. The diploma fee is \$5, and the Court fees for admission to the Bar are \$8. A further fee of \$5 is chargeable for admission to practice in the United States Courts for the District of Connecticut, if this is also desired. The tuition charges for other special students vary in proportion to the amount of instruction and supervision required. Board and lodgings can be obtained at prices ranging from \$5 a week upwards.

For further particulars, inquiries may be addressed to Professor Francis Wayland, Dean of the Faculty.

LIBRARIES

ADDISON VAN NAME, *Librarian*

FRANKLIN B. DEXTER, *Assistant Librarian*

J. SUMNER SMITH, *Librarian of the Linonian and Brothers Library*

HORACE KEPHART, *Assistant*

The Standing Committee in charge of the Library, appointed by the Corporation, consists of the following:—President DWIGHT, Ex-President PORTER, Professors SALISBURY, DAY, FISHER, NEWTON, and LOUNSBURY, and the Librarian.

The whole number of volumes in the several libraries of the University is about 183,000.

The UNIVERSITY LIBRARY contains about 130,000 volumes and at least half as many unbound pamphlets. For some years past the average annual increase has been 5,000 volumes. Of current periodical publications, including publications of learned societies, the Library receives an unusually large number, the foreign serials alone being not less than five hundred. While designed especially for the use of the officers, resident graduates, and students of the several Departments of the University, other persons may have the privilege of consulting, and by permission of the Library Committee, of drawing books. The Library is open daily, except Sundays, in term-time from 9:30 A. M. to 1 P. M., and from 2:30 to 5 P. M. (in Winter to 4:30 P. M.). In the Winter vacation it is open during the usual morning hours, and in the Summer vacation on Monday, Wednesday, and Saturday mornings.

The LINONIAN AND BROTHERS LIBRARY, occupying the north wing of the Library building, contains 29,000 volumes, to which additions of not far from one thousand volumes, chiefly of the best current literature, are annually made. It is designed primarily for the use of the students, and is open in term-time on Monday, Tuesday, Thursday, and Friday, from 1:30 to 3 P. M., and on Wednesday and

Saturday from 10 A. M. to 12 M., and from 1:30 to 4 P. M. In vacation it is open on Wednesday and Saturday from 10 to 12 A. M.

In addition to the periodicals received at the University Library there will be found in the Reading Room (in the Cabinet building) forty-four daily newspapers, American and foreign, as many weeklies, and fifty periodicals. This is open daily in term-time from 9:30 A. M. to 8 P. M. (on Sunday from 1 to 8 P. M.).

In Dwight Hall, which is open daily from 10 A. M. to 10 P. M., will also be found forty-five newspapers and periodicals, mostly religious, and a library of one thousand volumes selected with main reference to the study of the Bible.

The LAW LIBRARY, containing 8,500 volumes, among which are included complete sets of the English, American, Irish, and Canadian Reports, occupies rooms adjoining those of the Law School in the County Court House. It is open daily in term-time from 8:30 A. M. to 12:45 P. M., and from 2 to 5:30 P. M. (except Saturday afternoon); in vacation from 9 A. M.

The SHEFFIELD SCIENTIFIC SCHOOL LIBRARY, in Sheffield Hall, is a valuable collection of 6,000 volumes, chiefly mathematical.

The TROWBRIDGE REFERENCE LIBRARY of the Divinity School, in Bacon Memorial Hall, contains about 3,000 volumes of standard and recent theological literature. It is open in term-time throughout the afternoon.

The LOWELL MASON LIBRARY OF CHURCH MUSIC, in West Divinity Hall, is accessible to those interested in the study of this subject. It embraces about 8,000 titles in 4,000 volumes.

The Art School has a Library of about five hundred volumes.

The Library of the Medical School is incorporated in the University Library.

The Library of the American Oriental Society, consisting of about four thousand books and manuscripts, is deposited in the University Library building.

PEABODY MUSEUM OF NATURAL HISTORY

TRUSTEES

PROFESSOR JAMES D. DANA, PH.D., LL.D., *Chairman*
GOVERNOR HENRY B. HARRISON, LL.D., *ex-officio*
HON. ROBERT C. WINTHROP, LL.D.
PROFESSOR GEORGE J. BRUSH, LL.D., *Treasurer*
PROFESSOR OTHNIEL C. MARSH, PH.D., LL.D.
HON. GEORGE PEABODY WETMORE, M.A.
PROFESSOR EDWARD S. DANA, PH.D.

CURATORS

OTHNIEL C. MARSH, *Curator of the Geological Collection*
ADDISON E. VERRILL, *Curator of the Zoological Collection*
EDWARD S. DANA, *Curator of the Mineralogical Collection*

Twenty years since, in 1866, George Peabody, of London, but of Massachusetts birth, entrusted to a board of Trustees, selected by him, the sum of \$150,000, "to found and maintain a Museum of Natural History, especially in the departments of Zoology, Geology, and Mineralogy, in connection with Yale College." Of this sum \$100,000 was devoted by Mr. Peabody to the erection, "on land to be given for that purpose by the President and Fellows of Yale College, of a fire-proof building," "planned with special reference to its subsequent enlargement," to be, "when completed, the property of Yale College." Of the remainder of the gift, \$20,000 was set apart to "accumulate as a building fund," and \$30,000 to meet by its income from investment the expenses attending "the care of the museum, the increase of its collections, and the general interests of the departments of science before named."

Ten years later, in 1876, the first wing of the Museum—the part now standing—was completed and furnished with cases at a cost of \$175,000, the whole outlay being met by the accumulated building fund. The central part of the projected structure and the South wing—which will extend it to Library Street—remain to be built whenever the means available for the purpose shall be adequate.

The first floor of the building is devoted to the department of Mineralogy and to the purposes of a large lecture room. The minerals occupy cases in the west room, the door of which fronts the entrance to the Museum. The minerals of the Gibbs collection, deposited by Col. George Gibbs with the College in 1809-10 and purchased in 1825 at a cost of \$20,000, and the extensive accumulations since made are here preserved and for the most part on exhibition, making it one of the largest public collections in the country. The private cabinet of Professor Brush, arranged in drawers in his private room on the same story, although not open to general exhibition, adds greatly to the means of study and investigation in this department of the University. Besides minerals, the exhibition room contains one of the largest collections of meteorites in the country; among the specimens, there are the famous mass of meteoric iron from Texas, weighing 1635 pounds; some hundreds of meteorites, large and small, all of which came from a single fall in Iowa, in May, 1879; the interesting Weston meteorite, which fell at Weston, Connecticut, in 1807, and was soon after described at length by Professors Silliman and Kingsley; besides many others of special interest. A case in the center of the room contains the large and beautiful collection of Chinese artistic work in stone, chiefly in Jade and Agate, with other like objects, bequeathed to the college by Dr. S. Wells Williams, who was for 43 years in China as Christian philanthropist, editor, author, and attaché to the American legation, and for some years before his decease occupied the chair of Professor of Chinese in the University. The large room on the same story adjoining the Mineral room, on the north

side of the hall, is arranged for mineralogical and blowpipe instruction, with desks and a students' cabinet of minerals, and is under the charge of Mr. S. L. Penfield.

The second floor is given up to Geology and Paleontology. The western exhibition room is occupied by a general collection of fossils, arranged for the most part in the order of the geological formations, and the southern by vertebrate fossils. The latter are mostly collections made by Professor Marsh, the larger part from regions west of the Mississippi, in Kansas, the states and territories of the Rocky mountain region, Oregon, etc. In the vertebrate room, the horizontal case to the left of the entrance contains a large suite of specimens of remains of the *toothed* birds—the *Hesperornis* and *Ichthyornis*—discovered by Prof. Marsh in the Cretaceous rocks of Kansas; and near by in the first vertical case against the wall there are the bones of a large Mastodon from Southern New York. In the center of the room there are a part of the bones of a gigantic Dinosaur from Wyoming, and, standing vertically, a large slab with the skeleton of a Mosasaur from Kansas. The horizontal case to the right of the entrance and the vertical case adjoining it against the west wall contain the remains of another Dinosaur about 30 feet long, which, as the specimens show, had ranges of very broad and thick plates, and one or two rows of immense spines, along the back. In the lower part of the next vertical case, lies a thigh-bone of an *Atlantosaurus* (the largest of Dinosaurs, and of land animals yet known), this bone having a length (when entire) of about seven feet. In a horizontal case on the south side of the same room there are, among the feet of various animals, the bones of the feet of three-toed and four-toed horses from the lower Tertiary of Wyoming. In two wall cases at the southeastern corner are the remains of the *Dinocerata*, huge mammals from the Eocene of Wyoming. In the second wall case on the east are bones of the Miocene *Brontotheridae* from Dakota and Nebraska. Of the large collection of foot-prints belonging to the University, only

a few fine slabs are on exhibition, part of them in each of the two exhibition rooms of the second story. One of the most interesting is a slab about twelve feet long covered throughout with raindrop impressions, and, besides these, two lines of foot-prints of biped reptiles, one line of them extending the whole length of the slab.

The third story is occupied with the zoological collections so far as there is room for their exhibition. The general zoological collection occupies the western room; and nearly the whole has been accumulated since Professor Verrill took charge of the department. The specimens are well arranged for exhibition and all labeled. Facing the south door stands a vertical case devoted to the Sponges, among which are many species of the siliceous or glass sponges, (*Euplectella*, etc.) Beyond the sponges, twelve cases are filled with the collection of corals, which is one of the most extensive in the country. These are followed by the Echinoderms, etc. Several cases are devoted to a collection of the marine invertebrates of New England, which is nearly complete. Other cases contain special collections of the shells and corals of the Pacific Coast of America; of the corals of Bermuda; of the shells of Florida, etc. The collections are rich in species from the deep-sea dredgings in the Atlantic, but only a small part are on exhibition. Overhead are models, of natural size, of two of the huge Cephalopods of the world: one an Octopus from California, 28 feet in diameter (between the tips of opposite arms), and the other, nearer the door, a species of the Newfoundland seas, related to the Squids, having enormous eyes, and a length from the posterior extremity to the tip of the longer arms, of 42 feet. The models were made for the zoological department by Mr. J. H. Emerton.

The southern exhibition room of the zoological story contains a collection of skeletons in cases on its east and south sides, commencing near the door. These are deposited by Professor Marsh. The skeletons of Mammals, beginning with man and the apes, occupy all the east side;

and then come the birds, reptiles, and fishes. The rest of the cases are occupied with collections of Vertebrates, both mounted and alcoholic, and include a nearly complete series of the species inhabiting New England.

The second and third stories have also large laboratories and work rooms, devoted to the department represented in the exhibition rooms of the story. Those of the second or geological story are in charge of the Assistant Paleontologist, Mr. Oscar Harger; and those of the third or zoological story, besides serving for work rooms, are for the laboratory exercises and instruction of students in General Zoology under Professor Verrill, and in Biology and Comparative Anatomy under Professor Sidney I. Smith. These rooms also contain large collections of specimens arranged in drawers and trays, which are open to special students in the department.

In the fourth story there is a large Archæological collection. As the funds of the Museum are restricted to the departments of Mineralogy, Geology, and Zoology, the cases of the old Yale Museum were fitted up for this collection.

The basement is devoted to work rooms and store rooms and contains a vast amount of specimens in the departments especially of Paleontology and Zoology. This part of the building is always closed to visitors.

The exhibition rooms of the Museum are open between 9 A. M. and 6 P. M., except in the winter, when the hours are from 9 A. M. to 5 P. M. The janitor of the building is Mr. J. Rice, of 92 High street.

THE OBSERVATORY

BOARD OF MANAGERS

REV. TIMOTHY DWIGHT, D.D., LL.D., PRESIDENT

JACOB CAMPBELL, Esq.

PROFESSOR ELIAS LOOMIS, LL.D.

PROFESSOR CHESTER S. LYMAN, M.A.

PROFESSOR HUBERT A. NEWTON, LL.D., *Secretary*

THOMAS G. BENNETT, PH.B.

PROFESSOR CHARLES S. HASTINGS, PH.D.

OFFICERS

ROBERT BROWN, *Secretary*

LEONARD WALDO, *Astronomer*

WILLIAM L. ELKIN, *Astronomer*

ASAPH HALL, JR., *Assistant Astronomer*

THE OBSERVATORY has been built from the avails of the gift of the late Hon. Oliver F. Winchester, of New Haven, on land given by the late Mrs. Cornelia L. Hillhouse and her daughters. The principal astronomical instruments now in use are a six-inch Heliometer constructed by Messrs. Repsold, of Hamburg, and an eight-inch Equatorial by Messrs. Grubb, of Dublin, given by Mr. Edward M. Reed, of New Haven.

Besides its ordinary astronomical work, the Observatory has established two public services designed to supplement the work now in progress at other Observatories in the United States, and to afford such facilities to the Horological arts and to persons interested in accurate Thermometry, as are given at several of the prominent Observatories in Europe.

For the proper performance of these services the following equipment is in use:

1. Standard clocks, a transit instrument, chronographs, and the accessories for refined accuracy in the determination and transmission of time.

2. A complete arrangement for the testing of chronometers, watches, and clocks, in the various positions and conditions of temperature, arranged with reference to the safety against fire and theft of such instruments while in the care of the Observatory.

3. Apparatus for an extended (automatic) public time service.

4. Apparatus for research and comparison in Thermometry, including a collection of the best thermometers obtainable of the foreign makers and observatories which devote special attention to thermometric standards.

Descriptive circulars of the above services may be obtained by addressing the Observatory.

UNIVERSITY PRIZE

The JOHN A. PORTER PRIZE, of the value of two hundred and fifty dollars, established by the Kingsley Trust Association, is offered for the best English Essay on one of a list of subjects to be announced early in each college year. Competing essays must be handed in within one week after the close of the Spring Recess, and the award will be announced on Commencement Day. Any person who has been pursuing a regular course for a degree in any Department during the whole of the current College year, may compete for this prize. If none of the competing essays is of sufficient merit, the prize will not be awarded.

LISTS OF STUDENTS

DEPARTMENT OF PHILOSOPHY AND THE ARTS

COURSES OF GRADUATE INSTRUCTION

John Alpheus Allen, PH.B. } Yale University, 1883	<i>New Haven</i>	823 Chapel st.
Arthur Nathaniel Alling, B.A. } Yale University, 1886	<i>New Haven</i>	120 Sherman av.
Erwin Hinckley Barbour, B.A. } Yale University, 1882	<i>Oxford, O.</i>	187 C.
Samuel Eben Barney, C.E. } Yale University, 1885	<i>New Haven</i>	315 Orange st.
Malcom Booth, PH.B. } Yale University, 1879	<i>New Haven</i>	175 Oak st.
Edward Gaylord Bourne, B.A. } Yale University, 1883	<i>New Haven</i>	36 E.
William Adams Brown, B.A. } Yale University, 1886	<i>New York City</i>	28 S.
Carl Darling Buck, B.A. } Yale University, 1886	<i>Bucksport, Me.</i>	27 S.
Herbert DeWitt Carrington, PH.B. } Yale University, 1884	<i>New Haven</i>	1169 Chapel st.
Theodore Newton Case, PH.B. } Yale University, 1886	<i>Hartford</i>	287 York st.
Clarence Fassett Castle, M.A. } Denison University, 1883	<i>Granville, O.</i>	109 Elm st.
Mark Wilson Chunn, B.A. } Western Maryland College, 1882, B.D. Yale University, 1886	<i>Mechanicsville, Md.</i>	34 E.
Edward Allen Colby, PH.B. } Yale University, 1880	<i>New Haven</i>	433 Temple st.
Alfred Cowles, Jr., B.A. } Yale University, 1886	<i>Chicago, Ill.</i>	1173 Chapel st.
Clark Eugene Crandall, M.A. } Milton College	<i>Milton, Wisc.</i>	109 Elm st.
Stanford Tappan Crapo, B.A. } Yale University, 1886	<i>New Bedford, Mass.</i>	15 S.
Wilbur Lucius Cross, B.A. } Yale University, 1885	<i>Gurleyville</i>	43 S. M.

George Wyckoff Cummins, PH.B. } Yale University, 1884	<i>Vienna, N. Y.</i>	55 N. S. H.
George Edwin Eliot, Jr., B.A. } Yale University, 1886	<i>Clinton</i>	28 S.
Oliver Lanard Fassig, B.S. } Ohio State University, 1882	<i>Columbus, O.</i>	55 Insurance Bdg.
George Francis Garneau, B.A. } St. Louis University, 1886	<i>St. Louis, Mo.</i>	126 High st.
Chauncey William Goodrich, B.A. } Yale University, 1886	<i>New York City</i>	Dwight Hall
Asaph Hall, Jr., B.A. } Harvard University, 1882	<i>New Haven</i>	Observatory
Edmund Otis Hovey, B.A. } Yale University, 1884	<i>Minneapolis, Minn.</i>	90 N. M.
Washington Irving Hunt, B.A. } Yale University, 1886	<i>Columbus, Mich.</i>	52 E.
Fritz Jacobson, B.A. } Augustana College, 1885	<i>Rockford, Ill.</i>	49 Winchester av.
Duane Judson Kelsey, PH.B. } Yale University, 1884	<i>Killingworth</i>	Killingworth
David Denison Lambert, B.A. } Yale University, 1886	<i>New Haven</i>	163 Bradley st.
Charlton Miner Lewis, B.A. } Yale University, 1886	<i>New York City</i>	108 N.
Frank Gardner Moore, B.A. } Yale University, 1886	<i>Columbus, O.</i>	57 S. M.
Charles Newton Morris, B.A. } Yale University, 1882	<i>West Hartford</i>	189 C.
Camile Enrique Panl, B.S. } Coll. of Christian Brothers	<i>Aguacalientes, Mex.</i>	31 Broadway
William Henry Parks, B.A. } Yale University, 1886	<i>Clinton</i>	131 F.
Edward Johnson Phelps, B.A. } Yale University, 1886	<i>Andover, Mass.</i>	16 S.
Charles Wheeler Pierson, B.A. } Yale University, 1886	<i>Florida, N. Y.</i>	108 N.
Louis Valentine Pirsson, PH.B. } Yale University, 1882	<i>New York City</i>	8 Prospect pl.
Julius Howard Pratt, Jr., B.A. } Yale University, 1882	<i>Montclair, N. Y.</i>	187 C.
Sidney Armour Reeve, PH.B. } Yale University, 1885	<i>Dayton, O.</i>	409 Temple st.
Harley Fish Roberts, B.A. } Western Reserve University	<i>Cleveland, O.</i>	38 Elm st.
James Johnson Robinson, B.A. } College of New Jersey, 1884	<i>Granville, O.</i>	109 Elm st.
Frank Knight Sanders, B.A. } Ripon College, 1882	<i>Lakeville</i>	70 W.
John Christopher Schwab, B.A. } Yale University, 1886	<i>New York City</i>	57 S. M.

George Scott, M.A. } Alfred University }	Alfred Center, N. Y.	109 Elm st.
Samuel Washington Scott, B.A. } Yale University, 1886 }	New Haven	3 S.
James Alward Seymour, PH.B. } Yale University, 1885 }	Auburn, N. Y.	A.
William Tuttle Shepard, PH.B. } Yale University, 1884 }	Bristol	A.
Philemon Tecumseh Sherman, B.A. } St. Louis University, 1886 }	St. Louis, Mo.	126 High st.
Elias Hershey Sneath, M.A. } Lebanon Valley College, 1884, } B.D. Yale University, 1884 }	Columbia, Pa.	Middletown
Philip Battell Stewart, B.A. } Yale University, 1886 }	Middlebury, Vt.	16 S.
Calvert Townley, PH.B. } Yale University, 1886 }	Cincinnati, O.	101 W.
Curtiss Chauncey Turner, PH.B. } Yale University, 1885 }	Omaha, Nebr.	391 Temple st.
George Elliot Verrill, PH.B. } Yale University, 1885 }	New Haven	86 Whalley av.
Henry Stephens Washington, B.A. } Yale University, 1885 }	New Haven	27 S.
Wilbert Webster White, B.A. } Wooster University }	Wooster, O.	109 Elm st.
Charles Percy Willcox, B.S. } Swarthmore College, 1886 }	Media, Pa.	84 Wall st.
Wolff Willner, B.A. } Yale University, 1885 }	New Haven	157 Bradley st.

GRADUATE STUDENTS, 56

ACADEMICAL DEPARTMENT

(YALE COLLEGE)

SENIOR CLASS

William Maitland Abell	<i>Franklin</i>	88 N. M.
Charles Adams	<i>Litchfield</i>	129 F.
Chandler Parsons Anderson	<i>New York City</i>	229 D.
James Archbald, Jr.	<i>Scranton, Pa.</i>	228 D.
Arthur John Arn	<i>Kansas City, Kan.</i>	54 S. M.
Willoughby Babcock	<i>New Haven</i>	22 S.
Rodmond Vernon Beach	<i>New Haven</i>	132 F.
Gerald Hamilton Beard	<i>Chicago, Ill.</i>	143 York st.
John Bennetto	<i>New Haven</i>	134 F.
Elmer Fox Berkele	<i>New Haven</i>	164 F.
Lewis Sherrill Bigelow	<i>St. Paul, Minn.</i>	235 D.
Leslie Dayton Bissell	<i>Saxton's River, Vt.</i>	8 S.
Edward Lydston Bliss	<i>Newburyport, Mass.</i>	69 N. M.
Allan Blair Bonar	<i>Marquette, Mich.</i>	146 F.
Dwight Eliot Bowers	<i>New Haven</i>	209 Crown st.
Arthur Wolfe Brady	<i>Muncie, Ind.</i>	73 N. M.
William Sinclair Brigham	<i>Savannah, Ga.</i>	231 D.
Wilson Brooks	<i>Austin, Tex.</i>	20 S.
Carleton Lewis Brownson	<i>New Canaan</i>	130 F.
Edward Lathrop Burke	<i>Evanston, Ill.</i>	134 F.
William Savage Burns	<i>Bath, N. Y.</i>	131 F.
Ernest LeRoy Caldwell	<i>Windsor</i>	10 S.
Middleton Arnold Caldwell	<i>Newburyport, Mass.</i>	166 F.
Victor Bush Caldwell	<i>Omaha, Nebr.</i>	218 D.
Schuyler Casemate Carlton	<i>Cleveland, O.</i>	233 D.
Walter Boughton Chambers	<i>Brooklyn, N. Y.</i>	226 D.
Frederick Starkweather Chase	<i>Waterbury</i>	228 D.
Francis Cameron Clarke	<i>Sing Sing, N. Y.</i>	138 F.
Sanford Ellsworth Cobb	<i>Orange, N. Y.</i>	202 D.
Frank Cochrane	<i>Coxsackie, N. Y.</i>	11 S.
Alfred Coit	<i>New London</i>	233 D.
Ira Clifton Copley	<i>Aurora, Ill.</i>	202 D.
William Aaron Cornish	<i>Gillette, N. Y.</i>	181 Lyc.
Robert Nelson Corwin	<i>Baiting Hollow, N. Y.</i>	168 F.

William Hutchinson Cowles	<i>Chicago, Ill.</i>	212 D.
Alexander Brown Coxe	<i>New York City</i>	203 D.
John Cullinan, Jr.	<i>Bridgeport</i>	26 S.
Joseph Thomas Cunningham	<i>Norwich</i>	22 S.
John Hubbard Curtis	<i>New Haven</i>	91 N. M.
Thomas Hamlin Curtis	<i>New Haven</i>	91 N. M.
Henry Alexander Dann	<i>Lancaster, N. Y.</i>	69 N. M.
John Caspar Diehl	<i>Erie, Pa.</i>	121 N.
Willard Robinson Douglass	<i>Leavenworth, Kan.</i>	25 S.
Clarence Clark Ferris	<i>Sound Beach</i>	44 S. M.
Harry Burr Ferris	<i>Sound Beach</i>	44 S. M.
Frederic Wilson Francis	<i>Newington</i>	41 High st.
Bernard Francis Gaffney	<i>New Britain</i>	37 S. M.
Robert Alexander Gardiner	<i>New Haven</i>	129 Whitney av.
Andrew Frink Gates	<i>Lebanon</i>	7 S.
John Minor Gillespie	<i>Hard Times Landing, La.</i>	161 F.
Clarence Glisan	<i>Portland, Oregon</i>	14 S.
Edward Winchester Goodenough	<i>Winchester</i>	1 S.
Madison Grant	<i>New York City</i>	148 F.
Robert Beers Gray	<i>Birmingham</i>	4 S.
George Henry Guernsey	<i>Easton</i>	3 S.
William Jessup Hand	<i>Scranton, Pa.</i>	230 D.
Clinton Larue Hare	<i>Indianapolis, Ind.</i>	9 S.
Frederic Wells Hart	<i>Plainville</i>	11 S.
Horace Sedgwick Hart	<i>New Haven</i>	104 William st.
Clifford Wayne Hartridge	<i>Savannah, Ga.</i>	154 F.
George Griswold Haven, Jr.	<i>New York City</i>	203 D.
Robert Forbes Hawkes	<i>New Haven</i>	132 F.
Frederick Trevor Hill	<i>New York City</i>	2 S.
George Edwin Hill	<i>Stamford</i>	209 D.
Charles Mills Hinkle	<i>Cincinnati, O.</i>	225 D.
Clarke Wesley Holly	<i>Philadelphia, Pa.</i>	152 F.
Frank Clifford Howe	<i>Peoria, Ill.</i>	130 F.
John Howard Hume	<i>Poughkeepsie, N. Y.</i>	162 F.
Albert Gay Hunt	<i>Scranton, Pa.</i>	155 F.
DeWitt Clinton Huntington	<i>West Bingham, Pa.</i>	92 N. M.
Louis Kepler Hyde	<i>Plainfield, N. J.</i>	219 D.
Obed Wilson Irvin	<i>Dayton, O.</i>	101 N.
Henry Ivison	<i>New York City</i>	129 F.
Robert Irving Jenks	<i>Newport, N. H.</i>	162 F.
Charles Bulkley Jennings	<i>Fairfield</i>	209 D.
Oliver Gould Jennings	<i>Fairfield</i>	229 D.
Allen Wardner Johnson	<i>Watertown</i>	73 N. M.
Charles Keeler	<i>Auburn, N. Y.</i>	180 L.Y.C.
John Bassett Keep	<i>Brooklyn, N. Y.</i>	18 S.

William Burrage Kendall, Jr.	<i>Brooklyn, N. Y.</i>	212 D.
William Kent	<i>San Rafael, Cal.</i>	201 D.
Henry Belden Ketcham *	<i>Dover Plains, N. Y.</i>	141 F.
John Scott King	<i>Unionville</i>	4 S.
John Henry Kirkham	<i>Newington</i>	85 N. M.
Charles Asher Knight	<i>Peekskill, N. Y.</i>	6 S.
Samuel Knight	<i>Oakland, Cal.</i>	210 D.
Yan Phou Lee	<i>Fragrant Hills, China</i>	90 N. M.
Alfred Leeds	<i>Stamford</i>	179 LYC.
Frank Dodge Leffingwell	<i>Montclair, N. J.</i>	13 S.
John Leverett	<i>Binghamton, N. Y.</i>	13 S.
Robert Hart Lewis	<i>New Haven</i>	438 George st.
Charles Henry Ludington, Jr.	<i>New York City</i>	278 L.
William Howard Ludington	<i>New York City</i>	278 L.
Harry Lyne	<i>Augusta, Ill.</i>	295 York st.
James McCormick, Jr.	<i>Harrisburg, Pa.</i>	157 F.
William McCormick	<i>Harrisburg, Pa.</i>	204 D.
Robert Maxwell	<i>Rockville</i>	211 D.
Henry Lawton May	<i>North Brookfield, Mass.</i>	12 S.
Frank Adams Meacham	<i>Fort Douglas, Utah</i>	146 F.
Joseph Weed Middlebrook	<i>Wilton</i>	6 S.
Clarence Tomlinson Morse	<i>Chicago, Ill.</i>	235 D.
Richard Dana Morse, Jr.	<i>Newton Highlands, Mass.</i>	166 F.
George Francis Nesbitt	<i>Kingston, Pa.</i>	163 F.
Edward Hiram Norton, Jr.	<i>Orange, N. J.</i>	120 N.
Homer Tomlinson Partree	<i>Woodbury</i>	164 F.
Louis Harman Peet	<i>Brooklyn, N. Y.</i>	227 D.
Arthur Reed Pennell	<i>Brunswick, Me.</i>	181 LYC.
Thomas Penney	<i>London, England</i>	92 N. M.
Thomas Norwood Penrose	<i>Philadelphia, Pa.</i>	12 S.
Arthur Perkins	<i>Hartford</i>	219 D.
Herbert Farrington Perkins	<i>Harvard, Mass.</i>	138 F.
George Daniel Pettee	<i>Sharon, Mass.</i>	25 S.
William Lyon Phelps	<i>New Haven</i>	44 High st.
Frederic Smith Pickett	<i>Tariffville</i>	10 S.
Robert William Playford	<i>Uniontown, Pa.</i>	148 F.
John Norton Pomeroy	<i>San Francisco, Cal.</i>	211 D.
Thomas Wyman Porter	<i>Montclair, N. J.</i>	156 F.
Albert Richard Pritchard	<i>Rochester, N. Y.</i>	161 F.
John Rogers, Jr.	<i>Stamford</i>	201 D.
Benjamin Romaine	<i>San Francisco, Cal.</i>	182 LYC.
Edward Tallmadge Root	<i>Springfield, O.</i>	569 Elm st.
Isaac Grant Rosenzweig	<i>Erie, Pa.</i>	121 N.
Charles Otis Scoville	<i>Montpelier, Vt.</i>	8 S.
William Albert Setchell	<i>Norwich</i>	88 N. M.

Lewis Seymour	<i>Binghamton, N. Y.</i>	210 D.
James Rockwell Sheffield	<i>Utica, N. Y.</i>	208 D.
Walter Bradley Sheppard	<i>Penn Yan, N. Y.</i>	165 F.
John Calhoun Simonds	<i>Charleston, S. C.</i>	163 F.
Frank Clifton Smith	<i>Gurleyville</i>	7 S.
Paul Spencer	<i>Brooklyn, N. Y.</i>	227 D.
Fred Sprague	<i>Chicago, Ill.</i>	160 F.
Edward Staehlin	<i>Newark, N. J.</i>	49 S. M.
Maximilian Lincoln Stein	<i>Milwaukee, Wisc.</i>	38 High st.
William Pirrie Taylor	<i>Southbridge, Mass.</i>	120 N.
William Larned Thacher	<i>New Haven</i>	204 D.
Richard Simms Thomas	<i>Boonton, N. J.</i>	9 S.
Joseph Lyle Thornton, Jr.	<i>Middletown, O.</i>	39 S. M.
Charles Louis Torrey	<i>Putnam</i>	113 N.
Howard Crosby Tracy	<i>Plainfield, N. J.</i>	157 F.
Elford Parry Trowbridge	<i>New Haven</i>	75 N. M.
Francis Bacon Trowbridge	<i>New Haven</i>	280 L.
Wm. Rutherford Hayes Trowbridge, Jr.	<i>New Haven</i>	280 L.
Frank Day Tuttle	<i>Brooklyn, N. Y.</i>	226 D.
James Johnston Waring, Jr.	<i>Savannah, Ga.</i>	154 F.
William Xenophon Weed	<i>Stamford</i>	59 S. M.
Frederick Searle Woodward	<i>Brooklyn, N. Y.</i>	152 F.
George Stanley Woodward	<i>Wilkesbarre, Pa.</i>	208 D.
George Hurlbut Young	<i>New York City</i>	225 D.

SENIORS, 148

JUNIOR CLASS

Edmund Allen	<i>St. Louis, Mo.</i>	223 D.
Joshua Wilson Allen	<i>Hartford</i>	221 D.
Hallock Calvin Alvord	<i>Gloversville, N. Y.</i>	242 L.
Edward Francis Ayres	<i>New Canaan</i>	255 L.
Leonard Woolsey Bacon, Jr.	<i>Norwich</i>	254 L.
Charles Francis Baldwin	<i>Princeton, Ill.</i>	17 S.
William Pitt Baldwin	<i>New Haven</i>	32 Martin st.
Harry Beecher	<i>Brooklyn, N. Y.</i>	220 D.
Jesse Hatch Behrends	<i>Brooklyn, N. Y.</i>	255 L.
Francis Bergstrom	<i>Minneapolis, Minn.</i>	119 N.
William Bascom Bissell	<i>Lakeville</i>	174 F.
Henry Whiting Boies	<i>Scranton, Pa.</i>	242 L.
Clayton Harcourt Brigham	<i>Savannah, Ga.</i>	224 D.
William Barrett Brinsmade	<i>Brooklyn, N. Y.</i>	183 LYC.
George Olney Brott	<i>Thompson</i>	273 L.

Louis Righter Brown	<i>Auburn, N. Y.</i>	249 L.
Henry Barnard Brownell	<i>Hartford</i>	103 N.
Philip Dibble Bunce	<i>Hartford</i>	250 L.
Winthrop Grant Bushnell	<i>New Haven</i>	244 L.
Arthur Kennard Buxton	<i>Brooklyn, N. Y.</i>	133 F.
William Campbell	<i>New York City</i>	251 L.
Laurance Johnson Carmalt	<i>New Haven</i>	251 L.
John Franklin Carter	<i>Orange, N. Y.</i>	247 L.
Benjamin Austin Cheney	<i>New Haven</i>	244 L.
William Spencer Clark	<i>Granby, Mass.</i>	262 L.
Harlan Ward Cooley	<i>Dubuque, Iowa</i>	245 L.
Charles Edward Cornwall	<i>New Haven</i>	43 Dwight pl.
Willis Gaylord Cosad	<i>Phelps, N. Y.</i>	147 F.
Harry Hall Covell	<i>Rochester, N. Y.</i>	74 N. M.
Samuel Monod Cross	<i>Westerly, R. I.</i>	135 F.
George Perkins Douglas	<i>Minneapolis, Minn.</i>	217 D.
Thomas Burnham Enders	<i>Hartford</i>	262 L.
Edward Sherman Farrington	<i>Brooklyn, N. Y.</i>	173 F.
Edward Colton Fellowes	<i>Hartford</i>	105 N.
Dudley Ferguson	<i>Cincinnati, O.</i>	119 N.
Irving Fisher	<i>New Haven</i>	115 Park st.
William Howard Fitzgerald	<i>Chicago, Ill.</i>	248 L.
George Barber Fowler	<i>Thompsonville</i>	254 L.
Hervey Richards Franklin	<i>North Attleboro, Mass.</i>	151 F.
Asa Oran Gallup	<i>Oneida, N. Y.</i>	72 N. M.
George Metcalf Gill	<i>Orange, N. Y.</i>	258 L.
Harold Russell Griffith	<i>Springfield, Mass.</i>	167 F.
Henry Huntley Haight	<i>Alameda, Cal.</i>	
Alfred Hand, Jr.	<i>Scranton, Pa.</i>	230 D.
Daniel Bailey Hardenbergh	<i>Port Jervis, N. Y.</i>	170 F.
Eugene Wendell Harter	<i>Albany, N. Y.</i>	169 F.
Frank Rufus Herrick	<i>Cleveland, O.</i>	249 L.
James Ormerod Heyworth	<i>Chicago, Ill.</i>	248 L.
Frank Wells Hubbard	<i>Litchfield</i>	149 F.
Dorr Albert Hudson	<i>Wakefield, Mass.</i>	Dwight Hall
Richard Melancthon Hurd	<i>New York City</i>	
Moses Jacob Husinsky	<i>New Haven</i>	84 N. M.
Orland Sidney Isbell	<i>New Haven</i>	116 Howe st.
John Couzu Kebabian	<i>Rodosto, Turkey</i>	99 N.
Charles Allen Klots	<i>Brooklyn, N. Y.</i>	135 F.
John Jacob Kutz	<i>Reading, Pa.</i>	246 L.
Wolcott Griswold Lane	<i>Sandusky, O.</i>	250 L.
Jesse Thomas Lazear	<i>Pittsburgh, Pa.</i>	165 F.
Theodore Lockwood Leverett	<i>Binghamton, N. Y.</i>	103 N.
Clarence Wyman Lincoln	<i>Philadelphia, Pa.</i>	139 F.

William Loving, Jr.	<i>St. Joseph, Mo.</i>	273 L.
Harry Weber McCauley	<i>Reading, Pa.</i>	272 L.
Charles Berghaus McConkey	<i>Harrisburg, Pa.</i>	149 F.
Joseph McElroy, Jr.	<i>Kansas City, Mo.</i>	184 York st.
James Howard McMillan	<i>Detroit, Mich.</i>	234 D.
William Davis Manro	<i>Auburn, N. Y.</i>	215 D.
Frederic William Mar	<i>West Haven</i>	99 N.
Gard Maynard	<i>Marquette, Mich.</i>	145 F.
Duncan Salisbury Merwin	<i>New Haven</i>	46 S. M.
Carl Meyer	<i>Chicago, Ill.</i>	264 L.
Frank Vincent Millard	<i>Tarrytown, N. Y.</i>	272 L.
Arthur Lewis Moore	<i>New York City</i>	247 L.
David Whipple Morison	<i>Minneapolis, Minn.</i>	224 D.
Charles Neave	<i>Cincinnati, O.</i>	246 L.
Harold VanMeter Ogden	<i>Chicago, Ill.</i>	151 F.
Irving Olmstead	<i>Stamford</i>	131 F.
Frederic Holmes Paine	<i>Bangor, Me.</i>	175 F.
Lucius Noyes Palmer	<i>Brooklyn, N. Y.</i>	24 S.
Frank Ilsley Paradise	<i>Andover, Mass.</i>	105 N.
William Andrews Parshall	<i>Port Jervis, N. Y.</i>	170 F.
Edwin Parsons	<i>New York City</i>	231 D.
George Madison Pavey	<i>Washington C. H., O.</i>	139 Elm st.
Harrison Gray Platt	<i>Milford</i>	55 S. M.
Edward Pond	<i>San Francisco, Cal.</i>	1010 Chapel st.
Philip Pond	<i>New Haven</i>	220 Whalley av.
Herbert Warren Porter	<i>Bridgeport</i>	38 S. M.
Alfred Raymond	<i>Brooklyn, N. Y.</i>	139 F.
Thomas Emerson Ripley	<i>Rutland, Vt.</i>	245 L.
Samuel Sidney Breese Roby	<i>Rochester, N. Y.</i>	256 L.
Thomas Frederick Sanford	<i>Redding</i>	145 F.
James Robert Seeley	<i>Bridgeport</i>	38 S. M.
William Henry Seward, Jr.	<i>Auburn, N. Y.</i>	178 LYC.
Edward Leland Smith	<i>Ansonia</i>	217 D.
Fred Palmer Solley	<i>Orange, N. Y.</i>	258 L.
Amos Alonzo Stagg	<i>Orange, N. Y.</i>	Dwight Hall
Leo Stein	<i>Chicago, Ill.</i>	264 L.
Bernard Christian Steiner	<i>Baltimore, Md.</i>	169 F.
Henry Ebenezer Stevens, Jr.	<i>New York City</i>	72 N. M.
Edward Albert Stevenson	<i>Brooklyn, N. Y.</i>	10 Howe st.
Frederic Augustus Stevenson	<i>Brooklyn, N. Y.</i>	10 Howe st.
Henry Lewis Stimson	<i>New York City</i>	256 L.
William Stephen Stone	<i>New Britain</i>	221 D.
John Hudson Storer	<i>Norwich</i>	137 F.
Henry Strunz	<i>Bristol</i>	104 N.
Thomas Hunt Talmage	<i>Brooklyn, N. Y.</i>	179 LYC.

Eliphalet Bradford Terry	<i>Brooklyn, N. Y.</i>	106 N.
Edward Seymour Thomas	<i>Providence, R. I.</i>	41 S. M.
Hector William Thomas	<i>New York City</i>	24 S.
Frank Lincoln Thompson	<i>Denver, Col.</i>	82 N. M.
Frank Burr Tibbals	<i>New Haven</i>	46 S. M.
Edward Montclair Tillinghast	<i>Hope Valley, R. I.</i>	259 L.
Elbert Reynolds Tillinghast	<i>Hope Valley, R. I.</i>	259 L.
Herbert Cushing Tolman	<i>Hanover, Mass.</i>	173 F.
Winthrop Turney	<i>Astoria, N. Y.</i>	168 F.
Willard Lamb Velie	<i>Moline, Ill.</i>	222 D.
Fred Ayer Verplanck	<i>Franklin</i>	147 F.
William Miller Vinton	<i>Athol, Mass.</i>	215 D.
Morison Remich Waite, Jr.	<i>Toledo, O.</i>	178 LYC.
Samuel Johnson Walker	<i>Chicago, Ill.</i>	223 D.
Frederic William Wallace	<i>Ansonia</i>	234 D.
Brownlee Robertson Ward	<i>New Haven</i>	138 Temple st.
William Drew Washburn, Jr.	<i>Minneapolis, Minn.</i>	218 D.
Asher Miner Wellman	<i>Friendship, N. Y.</i>	257 L.
Monroe Nichols Wetmore	<i>Lebanon</i>	174 F.
Arthur White	<i>Brooklyn, N. Y.</i>	220 D.
Porter Gouverneur Willett	<i>Buffalo, N. Y.</i>	222 D.
Frank Lincoln Woodward	<i>Denver, Col.</i>	214 D.
Ephraim Miller Youmans	<i>New York City</i>	257 L.

JUNIORS, 128

SOPHOMORE CLASS

Burr Reeve Abbe, Jr.	<i>Hartford</i>	281 L.
William Pope Aiken	<i>Rutland, Vt.</i>	67 N. M.
William Whitney Ames	<i>Rockville</i>	1 TR.
William Lucius Armstrong	<i>Cleveland, O.</i>	64 S. M.
Henry Cornelius Atkins	<i>Indianapolis, Ind.</i>	177 F.
Arnold Plumer Austin	<i>Philadelphia, Pa.</i>	265 L.
John Wallace Banks	<i>Guilford</i>	65 N. M.
Donald McLean Barstow	<i>Flushing, N. Y.</i>	131 High st.
Horace Bennet Bartholomew	<i>Pottsville, Pa.</i>	186 C.
John William Beckwith	<i>Chicago, Ill.</i>	155 Elm st.
Freeman Davidson Beerman	<i>Gouverneur, N. Y.</i>	33 Howe st.
Ernest Smith Bishop	<i>Guilford</i>	65 N. M.
Dwight Walter Bissell	<i>Ahmednagar, India</i>	29 S.
Lester Bradner, Jr.	<i>Dansville, N. Y.</i>	84 Wall st.

Walter Shaw Brewster	<i>Brooklyn, N. Y.</i>	282 L.
Charles Twing Brooks	<i>Salem, O.</i>	69 High st.
Embury Browning	<i>Poughkeepsie, N. Y.</i>	40 S. M.
Thomas Walter Buchanan	<i>Albany, Vt.</i>	76 N. M.
Hillhouse Buel	<i>Asheville, N. C.</i>	81 N. M.
Augustus Coburn	<i>Indianapolis, Ind.</i>	116 N.
George Coghill	<i>New York City</i>	1010 Chapel st.
Walter Joseph Connor	<i>New Haven</i>	37 S. M.
Albert St. Clair Cook	<i>Hartford</i>	214 D.
Howard Copland	<i>Columbus, O.</i>	109 Elm st.
William Herbert Corbin	<i>Hartford</i>	100 N.
Safford Arnold Crummey	<i>Poughkeepsie, N. Y.</i>	56 S. M.
Thomas Mitchell Cullinan	<i>Bridgeport</i>	26 S.
Wm. Chester DeForest Dickinson	<i>New Haven</i>	17 Ward st.
Thomas Elliott Donnelley	<i>Chicago, Ill.</i>	266 L.
Eugene Henry Dupee	<i>Chicago, Ill.</i>	191 C.
Louis Cazenove duPont	<i>Wilmington, Del.</i>	62 S. M.
Frederick Wesley Ellis	<i>Ansonia</i>	311 York st.
Joseph Ralph Ensign	<i>Simsbury</i>	266 L.
Joseph Grant Ewing	<i>Harrisburg, Pa.</i>	279 L.
Samuel Herbert Fisher	<i>Cincinnati, O.</i>	176 F.
Claude Lamot Forbes	<i>Canastota, N. Y.</i>	56 S. M.
Leopold Joseph Francke	<i>New York City</i>	237 D.
Albert Myrick Freeman	<i>Provincetown, Mass.</i>	76 N. M.
John Randolph Galt	<i>Newburgh, N. Y.</i>	237 D.
Edward James Gavegan	<i>Rockville</i>	30 S.
Charles Otis Gill	<i>Orange, N. Y.</i>	253 L.
Porter Beach Godard	<i>North Granby</i>	23 S.
William Brownell Goodwin	<i>Hartford</i>	282 L.
John Cornelius Griggs	<i>Terryville</i>	100 N.
Robert Foote Griggs	<i>Waterbury</i>	216 D.
Thomas Hanlon, Jr.	<i>Pennington, N. Y.</i>	71 N. M.
Robert Hartshorne	<i>Highlands, N. Y.</i>	253 L.
Charles Hegamin, Jr.	<i>Troy, N. Y.</i>	480 Elm st.
Edward Barrett Hinckley	<i>Northampton, Mass.</i>	47 S. M.
Howland Hoadley	<i>New York City</i>	279 L.
Jefferson Carter Hosea	<i>St. Joseph, Mo.</i>	68 N. M.
Leverett Lord Hull	<i>Cincinnati, O.</i>	265 L.
Joseph Selden Huntington, Jr.	<i>Old Lyme</i>	176 F.
Robert Watkinson Huntington, Jr.	<i>Hartford</i>	239 D.
Arthur May Hyde	<i>Rockville</i>	107 N.
Baruch Israeli	<i>New Haven</i>	188 C.
Benjamin Willard Jacobs	<i>Denver, Col.</i>	30 S.
Arthur Edmands Jenks	<i>Brockton, Mass.</i>	192 C.
James Henry Keefe	<i>Chester, Mass.</i>	216 D.

Charles Foster Kent	<i>Palmyra, N. Y.</i>	277 L.
Charles Sherman King	<i>Wabash, Ind.</i>	45 S. M.
George Lyman Lamphier	<i>Goshen</i>	190 C.
Charles Chandler Griswold Lane	<i>Sandusky, O.</i>	23 S.
Charles William Lefler	<i>Cincinnati, O.</i>	71 N. M.
Milton Marshall Lemer	<i>Harrisburg, Pa.</i>	104 N.
Elmer Francis Letcher	<i>Southbridge, Mass.</i>	33 S. M.
Fred Nye Lindsay	<i>Troy, N. Y.</i>	84 N. M.
Olaus Edward Loe	<i>Grand Meadow, Minn.</i>	190 C.
Joseph Wilson Lucas	<i>Philadelphia, Pa.</i>	63 S. M.
Robert Lee Luce	<i>Hartwick, N. Y.</i>	48 S. M.
Eugene Emile McCandliss	<i>Philadelphia, Pa.</i>	313 York st.
Joseph Sprigg McMahon	<i>Dayton, O.</i>	270 L.
William Adolphe McQuaid	<i>New Haven</i>	181 Orchard st.
Henry Latham Magruder	<i>Chicago, Ill.</i>	1002 Chapel st.
Henry Eager Mason	<i>Chicago, Ill.</i>	1002 Chapel st.
William Ross Matson	<i>Hartford</i>	42 S. M.
Mark Edward Merrifield	<i>New York City</i>	172 F.
John Fuller Appleton Merrill	<i>Portland, Me.</i>	62 S. M.
William Clifford Moore	<i>New York City</i>	1010 Chapel st.
Augustus Henry Mosle	<i>New York City</i>	206 D.
Harry Ford Noyes	<i>Georgetown, Mass.</i>	64 S. M.
John Ball Osborne	<i>Wilkes-Barre, Pa.</i>	68 N. M.
William Herbert Page	<i>Ironton, O.</i>	252 L.
Edward Lambe Parsons	<i>New Rochelle, N. Y.</i>	144 F.
Charles Cook Paulding	<i>Peekskill, N. Y.</i>	252 L.
George Clarke Peck	<i>New Haven</i>	224 Oak st.
Israel Hyman Peres	<i>Memphis, Tenn.</i>	98 N.
Gordon Brainerd Pike	<i>Middletown</i>	120 York st.
Gifford Pinchot	<i>New York City</i>	144 F.
Robert Treat Platt	<i>Milford</i>	55 S. M.
Samuel Newman Pond	<i>Falls Church, Va.</i>	32 S.
Harry Lathrop Reed	<i>Manchester, Vt.</i>	87 N. M.
Charles G. Reynolds	<i>Wolcott, N. Y.</i>	40 S. M.
Oliver Huntington Richardson	<i>New Britain</i>	281 L.
Henry Seymour Robinson	<i>Hartford</i>	238 D.
William Hayden Rockwell	<i>New York City</i>	206 D.
James Gamble Rogers	<i>Chicago, Ill.</i>	177 F.
Robert Ogden Rogers	<i>Scarborough, N. Y.</i>	32 S.
Henry Judson Sage	<i>Cincinnati, O.</i>	274 L.
Frederic Henry Sanford	<i>Palmyra, N. Y.</i>	277 L.
William Davis Sawyer	<i>Dover, N. H.</i>	48 S. M.
Ferdinand Schwill	<i>Cincinnati, O.</i>	25 High st.
Edmund Daniel Scott	<i>New Haven</i>	44 Vernon st.
Frederick Andrew Scott	<i>Terryville</i>	60 S. M.

Edward Ewing Sears	<i>Northampton, Mass.</i>	31 S.
Thomas Gaskell Shearman	<i>London, England</i>	53 S. M.
Charles Hitchcock Sherrill, Jr.	<i>Washington, D. C.</i>	263 L.
Charles Sanford Skilton	<i>Northampton, Mass.</i>	31 S.
Herbert Augustine Smith	<i>Worcester, Mass.</i>	97 N.
Samuel Lewis Smith	<i>Cleveland, O.</i>	63 S. M.
Langdon Trufant Snipe	<i>Bath, Me.</i>	186 C.
Horace Sheldon Stokes	<i>Detroit, Mich.</i>	238 D.
Lewis Austin Storrs	<i>Hartford</i>	60 S. M.
Joseph Parsons Tuttle	<i>Hartford</i>	98 N.
John Underhill	<i>Bath, N. Y.</i>	274 L.
Charles Abernethy Valentine	<i>New York City</i>	191 Temple st.
Howard Wills Vernon	<i>Brooklyn, N. Y.</i>	270 L.
Horace Fletcher Walker	<i>Detroit, Mich.</i>	172 F.
Thomas Pinckney Waring	<i>Savannah, Ga.</i>	45 S. M.
Charles Milnor Washington	<i>New Haven</i>	174 Orange st.
Lewis Sheldon Welch	<i>Hartford</i>	239 D.
Hubert Wetmore Wells	<i>Louisville, Ky.</i>	193 C.
Philip Patterson Wells	<i>Louisville, Ky.</i>	193 C.
DeWitt Clinton West	<i>Lowville, N. Y.</i>	232 D.
Edmund Burr White	<i>Holbrook, Mass.</i>	74 Howe st.
James Thomas Whittlesey	<i>Washington, D. C.</i>	53 S. M.
Howard Hunter Williams	<i>North Adams, Mass.</i>	97 N.
William Carver Williams	<i>Cleveland, O.</i>	192 C.
Andrew Ludwig Winters	<i>Reading, Pa.</i>	29 S.
George Washington Woodruff	<i>Scranton, Pa.</i>	87 N. M.
Horace Wylie	<i>Washington, D. C.</i>	263 L.

SOPHOMORES, 131

FRESHMAN CLASS

Jacob Jay Abt	<i>Chicago, Ill.</i>	233 York st.
George Loveless Amerman	<i>Syracuse, N. Y.</i>	268 L.
Edgar Ames	<i>St. Louis, Mo.</i>	1002 Chapel st.
William Washington Ater	<i>St. Louis, Mo.</i>	84 Wall st.
Maximilian Baird	<i>Chicago, Ill.</i>	128 High st.
Roger Sherman Baldwin	<i>New Haven</i>	44 Wall st.
Frank Pennington Ball	<i>New York City</i>	158 F.
James Robertson Barbour	<i>New Haven</i>	231 York st.
Harry Jenkins Bardwell	<i>Tunkhannock, Pa.</i>	96 N. M.
Thomas Francis Bayard, Jr.	<i>Wilmington, Del.</i>	90 High st.
William Henry Beckford	<i>Orange, N. J.</i>	93 N. M.

Frederick Bedell	<i>Montclair, N. J.</i>	125 N.
Albert Bingley Bennett	<i>Williamson, N. Y.</i>	93 N. M.
Frank Stymets Bishop	<i>New Haven</i>	61 Lyon st.
Herbert Morton Bishop	<i>New Haven</i>	215 Church st.
Charles Bemis Bliss	<i>Abington</i>	37 Lynwood st.
Charles Wright Boltwood	<i>New Haven</i>	77 Wall st.
James Howard Bonbright	<i>Philadelphia, Pa.</i>	238 York st.
Charles Cranston Bovey	<i>Minneapolis, Minn.</i>	269 L.
Frank Eli Bradley	<i>Sandwich, Mass.</i>	111 N.
John Williams Brady	<i>Warsaw, N. Y.</i>	134 College st.
Edward Brooks, Jr.	<i>Philadelphia, Pa.</i>	203 York st.
Frank Terry Brooks	<i>New Haven</i>	141 Edwards st.
Gouverneur Calhoun	<i>Chicago, Ill.</i>	139 Elm st.
George Henry Capen	<i>St. Louis, Mo.</i>	237 Orange st.
Bert Francis Case	<i>Granby</i>	79 N. M.
Amasa Day Chaffee	<i>Moodus</i>	140 F.
Paul Clagstone	<i>Minneapolis, Minn.</i>	90 Wall st.
Howard Dennis Collins	<i>Newport, R. I.</i>	223 York st.
Arthur Willis Colton	<i>Warren</i>	111 N.
John White Corwith	<i>Chicago, Ill.</i>	166 York st.
Howard Elmer Crall	<i>New York City</i>	7 Library st.
Robert Dillon Crane	<i>New York City</i>	113 York st.
Albert Cushing Crehore	<i>Cleveland, O.</i>	337 Crown st.
John Crosby, Jr.	<i>Minneapolis, Minn.</i>	269 L.
George Henry Danforth	<i>Madison, N. J.</i>	80 N. M.
Arthur Pomeroy Day	<i>Hartford</i>	140 F.
Walter Alden DeCamp	<i>Cincinnati, O.</i>	127 N.
Walton Dennis	<i>Brooklyn, N. Y.</i>	9 Library st.
Andrew Glassell Dickinson, Jr.	<i>New York City</i>	159 F.
George Wells Dupee	<i>Chicago, Ill.</i>	191 C.
Clark Terry Durant	<i>Albany, N. Y.</i>	261 L.
Charles Dussler	<i>Clyde, N. Y.</i>	251 Crown st.
Charles Albert Ebersole	<i>Cincinnati, O.</i>	233 York st.
Wolcott Webster Ellsworth	<i>Hartford</i>	111 York st.
Arthur Espy	<i>Cincinnati, O.</i>	252 York st.
John Dorrance Farnham	<i>Wilkes-Barre, Pa.</i>	116 High st.
Horace Cheney Foote	<i>New York City</i>	82 Wall st.
Harry Gardner Foster	<i>St. Paul, Minn.</i>	1142 Chapel st.
Henry Thatcher Fowler	<i>Poughkeepsie, N. Y.</i>	407 Temple st.
George Herman Gebhart	<i>Dayton, O.</i>	133 College st.
George William Gedney	<i>Newburgh, N. Y.</i>	17 Wooster pl.
George Hills Gilman	<i>Hartford</i>	142 F.
Rodney Lawrence Glisan	<i>Portland, Oregon</i>	14 S.
Henry Champlin Graves	<i>Dayton, O.</i>	7 Library st.
William Sherman Greene	<i>Brooklyn, N. Y.</i>	110 N.

Elihu Marvin Griswold	<i>Eric, Pa.</i>	57 W.
Samuel Hale	<i>Chicago, Ill.</i>	192 York st.
Charles Humphrey Hamill	<i>Chicago, Ill.</i>	166 York st.
Bert Hanson	<i>Great Falls, N. H.</i>	96 N. M.
William Harmar	<i>Philadelphia, Pa.</i>	1162 Chapel st.
Reginald Fairfax Harrison	<i>New York City</i>	254 York st.
Julian Hartridge	<i>Savannah, Ga.</i>	271 L.
Charles Houston Haskell	<i>Norwich</i>	109 N.
Lewis Scofield Haslam	<i>Stamford</i>	59 S. M.
George Collier Hitchcock	<i>St. Louis, Mo.</i>	90 High st.
George Day Holmes	<i>Montclair, N. J.</i>	125 N.
Roland Holt	<i>New York City</i>	123 N.
George Henry Hotaling	<i>San Francisco, Cal.</i>	219 York st.
Addison Hills Hough	<i>Cleveland, O.</i>	285 York st.
Reuben Milton Hoyt	<i>New York City</i>	158 F.
May Humphreys	<i>New York City</i>	82 Wall st.
George Arthur Hurd	<i>New York City</i>	143 F.
Otis King Hutchinson	<i>Chicago, Ill.</i>	266 York st.
John DeCourcy Ireland	<i>New York City</i>	66 N. M.
Robert Livingston Ireland	<i>New York City</i>	66 N. M.
James Monfort Irvin	<i>Dayton, O.</i>	101 N.
John Day Jackson	<i>New York City</i>	150 College st.
Norman James	<i>Baltimore, Md.</i>	260 L.
Elliott Proctor Joslin	<i>Oxford, Mass.</i>	315 York st.
Charles Poole Kellogg	<i>Waterbury</i>	143 F.
Chester Henry Keogh	<i>Chicago, Ill.</i>	64 High st.
Elmo Henry Keyes	<i>New York City</i>	112 N.
Yale Kneeland	<i>Brooklyn, N. Y.</i>	110 N.
Stephen Hurlburt Kohler	<i>Akron, O.</i>	1187 Chapel st.
William Alfred Korn	<i>Norwich</i>	95 N. M.
George Newton Lawson	<i>Union</i>	33 S. M.
Harriman Willis Lee	<i>Buffalo, N. Y.</i>	133 College st.
Charles Fitch Lester	<i>Norwich</i>	95 N. M.
Thomas Jay Lloyd	<i>Brick Church, N. J.</i>	168 York st.
James Locke	<i>Buffalo, N. Y.</i>	1142 Chapel st.
Walter Irenæus Lowe	<i>Whitinsville, Mass.</i>	218 Willow st.
William Chittenden Lusk	<i>New York City</i>	128 N.
Abram Garrison McClintock	<i>Allegheny, Pa.</i>	90 High st.
Robert Gardner McClung	<i>Knoxville, Tenn.</i>	159 F.
William Appleton McConnel	<i>Beaver, Pa.</i>	77 N. M.
Donald McCormick	<i>Harrisburg, Pa.</i>	192 York st.
Ralph Augustine McDonnell	<i>Newburgh, N. Y.</i>	117 Crown st.
Thomas Edward McEvoy	<i>Hopkinton, Mass.</i>	78 N. M.
John Francis McGuire	<i>Hopkinton, Mass.</i>	78 N. M.
Elmer Wayne Marshall	<i>St. Clair, Pa.</i>	107 York st.

Henry Smith Mathewson	<i>Pomfret</i>	109 N.
Solomon Cristy Mead	<i>Greenwich</i>	271 L.
Frank Sherman Meara	<i>Westboro, Mass.</i>	77 N. M.
Robert Hale Merriam	<i>St. Paul, Minn.</i>	90 Wall st.
Knowlton Mixer	<i>Buffalo, N. Y.</i>	133 College st.
Richard Bartholomew Moriarty	<i>Putnam</i>	113 N.
Samuel Benjamin Morison	<i>Minneapolis, Minn.</i>	90 Wall st.
William Greenwood Morris	<i>New Haven</i>	408 Crown st.
Sidney Nelson Morse	<i>North Woodstock</i>	107 N.
Harry Loomis Munger	<i>Dayton, O.</i>	133 College st.
Edward Lyman Munson	<i>New Haven</i>	42 Elm st.
Ashbel Barney Newell	<i>Chicago, Ill.</i>	61 S. M.
George Nathan Newman	<i>Buffalo, N. Y.</i>	12 Whalley av.
Henry Opdyke	<i>Plainfield, N. J.</i>	25 College st.
Willard Parker, Jr.	<i>New York City</i>	252 York st.
Herbert Parsons	<i>New York City</i>	254 York st.
Richard Truman Percy	<i>New Haven</i>	99 Greene st.
Walter Hart Perry	<i>Oxford</i>	1187 Chapel st.
George Frederick Peter	<i>St. Louis, Mo.</i>	237 Orange st.
Stowe Phelps	<i>Brooklyn, N. Y.</i>	261 L.
Robert Eston Phyfe	<i>Delhi, N. Y.</i>	107 York st.
Eugene Rockwell Pike	<i>Chicago, Ill.</i>	114 High st.
Nathan Todd Porter, Jr.	<i>Montclair, N. J.</i>	156 F.
Harry Elbridge Pratt	<i>Chicago, Ill.</i>	233 York st.
George Wadsworth Raynes	<i>Charlestown, Mass.</i>	254 York st.
Charles Eliphalet Robbins	<i>Ruskey, N. Y.</i>	80 N. M.
Frederick William Robinson	<i>Dalton, Mass.</i>	126 N.
Stuart Henry Rowe	<i>New Haven</i>	30 Academy st.
Henry Manning Sage	<i>Albany, N. Y.</i>	128 N.
Leonard Cutler Sanford	<i>New Haven</i>	216 Crown st.
Daniel David Scharps	<i>Newburgh, N. Y.</i>	223 York st.
Henry Leo Scheuerman	<i>Griffin, Ga.</i>	575 State st.
Ernest Lynde Selden	<i>Hadlyme</i>	1010 Chapel st.
Howard Van Doren Shaw	<i>Chicago, Ill.</i>	166 York st.
Thomas Bond Shaw	<i>Worcester, Mass.</i>	64 High st.
Charles Alexander Sheldon	<i>Rutland, Vt.</i>	1002 Chapel st.
Edward Minot Shelton	<i>Litchfield</i>	94 N. M.
John Howard Sherwood	<i>Englewood, N. J.</i>	24 Home pl.
Wallace Delafield Simmons	<i>St. Louis, Mo.</i>	237 Orange st.
Charles Francis Small	<i>Pawtucket, R. I.</i>	79 N. M.
William Henry Smith	<i>New Haven</i>	245 Orange st.
William Howard Smith	<i>Ogden City, Utah</i>	107 York st.
Percy Hamilton Stewart	<i>Plainfield, N. J.</i>	214 Crown st.
Horatio Nelson Strait	<i>Troy, N. Y.</i>	1179 Chapel st.
John Francis Sullivan	<i>New Haven</i>	304 Exchange st.

James Willcox Thompson	<i>Bridgeport</i>	142 F.
Ralph Thompson	<i>Schenectady, N. Y.</i>	213 Crown st.
Albert Arthur Tilney	<i>Plainfield, N. J.</i>	214 Crown st.
John Barnes Townsend	<i>Silver Cliff, Col.</i>	260 L.
Evarts Tracy	<i>Plainfield, N. J.</i>	214 Crown st.
Henry Veeder	<i>Chicago, Ill.</i>	35 High st.
Horace Garfield Waite	<i>Chicago, Ill.</i>	114 High st.
James Allen Warner	<i>Albany, N. Y.</i>	252 York st.
George Alvin Watkinson	<i>New Haven</i>	232 D.
George Swift Welch	<i>Gowanda, N. Y.</i>	124 N.
Edwin Stanley Welles	<i>Newington</i>	94 N. M.
William White, Jr.	<i>Drifton, Pa.</i>	1162 Chapel st.
Joseph Lafon Winchell	<i>New Haven</i>	313 Orange st.
Lewis Bartholomew Woodruff	<i>New York City</i>	114 College st.
Henry Sterne Woodward	<i>Philadelphia, Pa.</i>	161 York st.
George Dallas Yeomans	<i>East Aurora, N. Y.</i>	124 N.
Samuel Albert York, Jr.	<i>New Haven</i>	139 Edwards st.
		FRESHMEN, 163

SUMMARY

SENIORS	.	.	.	.	.	.	148
JUNIORS	.	.	.	.	.	.	128
SOPHOMORES	.	.	.	.	.	.	131
FRESHMEN	.	.	.	.	.	.	163
							<hr/>
							570

SHEFFIELD SCIENTIFIC SCHOOL

GRADUATE STUDENTS

John Alpheus Allen, PH.B. } Yale University, 1883	<i>New Haven</i>	823 Chapel st.
Arthur Nathaniel Alling, B.A. } Yale University, 1886	<i>New Haven</i>	120 Sherman av.
Samuel Eben Barney, C.E. } Yale University, 1885	<i>New Haven</i>	315 Orange st.
Malcom Booth, PH.B. } Yale University, 1879	<i>New Haven</i>	175 Oak st.
Herbert DeWitt Carrington, PH.B. } Yale University, 1884	<i>New Haven</i>	1169 Chapel st.
Theodore Newton Case, PH.B. } Yale University, 1886	<i>Hartford</i>	287 York st.
Alfred Cowles, Jr., B.A. } Yale University, 1886	<i>Chicago, Ill.</i>	1173 Chapel st.
George Wyckoff Cummins, PH.B. } Yale University, 1884	<i>Vienna, N. Y.</i>	55 N. S. H.
George Francis Garneau, B.A. } St. Louis University, 1886	<i>St. Louis, Mo.</i>	126 High st.
Edmund Otis Hovey, B.A. } Yale University, 1884	<i>Minneapolis, Minn.</i>	90 N. M.
Duane Judson Kelsey, PH.B. } Yale University, 1884	<i>Killingworth</i>	Killingworth
Camilo Enrique Pani, B.S. College of the Christian Brothers, St. Louis, Mo.	<i>Aguacalientes, Mexico</i>	31 Broadway
Louis Valentine Pirsson, PH.B. } Yale University, 1882	<i>New York City</i>	8 Prospect pl.
Julius Howard Pratt, Jr., B.A. } Yale University, 1882	<i>Montclair, N. Y.</i>	187 C.
Sidney Armour Reeve, PH.B. } Yale University, 1885	<i>Dayton, O.</i>	409 Temple st.
James Alward Seymour, PH.B. } Yale University, 1885	<i>Auburn, N. Y.</i>	A.
William Tuttle Shepard, PH.B. } Yale University, 1884	<i>Bristol</i>	A.
Philemon Tecumseh Sherman, B.A. } St. Louis University, 1886	<i>St. Louis, Mo.</i>	126 High st.
Calvert Townley, PH.B. } Yale University, 1886	<i>Cincinnati, O.</i>	101 W.

Curtiss Chauncey Turner, PH.B. } Yale University, 1885	<i>Omaha, Nebr.</i>	391 Temple st.
George Elliot Verrill, PH.B. } Yale University, 1885	<i>New Haven</i>	86 Whalley av.
Henry Stephens Washington, B.A. } Yale University, 1885	<i>New Haven</i>	27 s.
Charles Percy Willcox, B.S } Swarthmore College, 1886	<i>Media, Pa.</i>	84 Wall st.

GRADUATE STUDENTS, 23

SENIOR CLASS

Henry Frederick Adams	<i>Westport</i>	293 George st.
Robert Clayton Augur	<i>West Haven</i>	West Haven
Elmer Ellsworth Bennett	<i>Plainfield</i>	330 Orange st.
Walter Pierpont Bigelow	<i>New Haven</i>	278 Orange st.
Herbert Spencer Bullard	<i>Hartford</i>	46 N. S. H.
Richard Augustus Chapman	<i>Rye, N. Y.</i>	116 w.
William Henry Coburn	<i>Indianapolis, Ind.</i>	36 Elm st.
Harry Fitch Coleman	<i>Logansport, Ind.</i>	1161 Chapel st.
Lewis Atterbury Conner	<i>New Albany, Ind.</i>	389 Temple st.
David Mark Cummings	<i>Chicago, Ill.</i>	36 Elm st.
Julius Gilbert Day	<i>Seymour</i>	205 Orange st.
William Greenhow Doane	<i>Omaha, Nebr.</i>	64 High st.
Edward Warburton Durant, Jr.	<i>Stillwater, Minn.</i>	43 College st.
Isadore Dyer, Jr.	<i>Galveston, Tex.</i>	88 Wall st.
Arthur Mansfield Everit	<i>New Haven</i>	161 Orange st.
Raymond Thomson French	<i>Seymour</i>	36 Elm st.
Francis Frederic Georger	<i>New York City</i>	36 Elm st.
Robert Fisher Gibson	<i>York, Pa.</i>	88 Wall st.
Charles Joseph Goldmark	<i>New York City</i>	35 High st.
Wilfred Elizur Griggs	<i>Waterbury</i>	389 Temple st.
George Conradt Ham	<i>Washington Hollow, N. Y.</i>	44 Elm st.
Harry Leon Hamlin	<i>Chicago, Ill.</i>	43 College st.
Edgar Burton Harger	<i>Oxford</i>	150 College st.
Herbert Leopold Hart	<i>Chicago, Ill.</i>	1161 Chapel st.
James Henry Hayden	<i>New York City</i>	1161 Chapel st.
William Brisbane Hickox	<i>Litchfield</i>	A.
Marvin D. Hubbell	<i>New York City</i>	138 York st.
Joseph Cooke Jackson, Jr.	<i>New York City</i>	60 w.
Lawrence Bates Jenckes	<i>Stamford</i>	116 w.
Leonard Abbot Jenkins	<i>Dresden, Saxony</i>	88 Wall st.
Charles Sherman Jewett	<i>Buffalo, N. Y.</i>	88 Wall st.

John Edwin Judson	<i>New Haven</i>	142 St. John st.
Frederick Sheffield Kellogg	<i>Utica, N. Y.</i>	43 College st.
Grayson Guthrie Knapp	<i>Auburn, N. Y.</i>	86 w.
Edward Linsley Maltby	<i>Northford</i>	149 College st.
Harley James Morrison	<i>Cincinnati, O.</i>	60 w.
William Partridge Ordway	<i>Boston, Mass.</i>	44 Elm st.
Edmund Bishop Patterson	<i>Allegheny City, Pa.</i>	1161 Chapel st.
Frank Adelbert Paul	<i>New Haven</i>	13 Washington st.
Charles Eugene Phillips	<i>Southington</i>	14 Prospect pl.
William Thomas Rainey	<i>Cleveland, O.</i>	86 w.
Harris Smith Reynolds	<i>Poughkeepsie, N. Y.</i>	43 College st.
John Robert Wheaton Sargent	<i>Chicago, Ill.</i>	36 Elm st.
William Marcelin Scaife	<i>Allegheny City, Pa.</i>	203 York st.
Oscar Harmon Short	<i>New York City</i>	43 College st.
Edward Arthur Smith	<i>Middletown</i>	1161 Chapel st.
Frank Mansfield Smith	<i>East Haven</i>	East Haven
Erwin Starr Sperry	<i>Ansonia</i>	41 High st.
Merton Pierpont Stevens	<i>New Haven</i>	561 Howard av.
Arthur Peale Summers	<i>Colorado Springs, Col.</i>	126 High st.
Howard Beecher Tuttle	<i>Naugatuck</i>	44 Elm st.
Alfred John Wakeman	<i>Green's Farms</i>	293 George st.
Frank Otto Walther	<i>Brooklyn, N. Y.</i>	88 Wall st.
Nathaniel P. Washburn	<i>Bridgewater, Mass.</i>	149 College st.
Frank Warren Wentworth	<i>Chicago, Ill.</i>	1161 Chapel st.
Edward Gilbert Williams	<i>Essex</i>	47 Stanley st.
George Henry Wood	<i>Dayton, O.</i>	88 Wall st.
Robert McKnight Woods	<i>New Haven</i>	364 George st.
		SENIORS, 58

JUNIOR CLASS

Arthur Chambers Alexander	<i>Honolulu, H. I.</i>	85 w.
John Childe Anderson	<i>Sing Sing, N. Y.</i>	65 w.
Joseph Albright Archbald	<i>Scranton, Pa.</i>	36 Elm st.
Gardner Ball, Jr.	<i>San Francisco, Cal.</i>	36 Elm st.
William Hill Bean	<i>New Haven</i>	40 Pleasant st.
Charles Bart Berger	<i>Denver, Col.</i>	88 Wall st.
George Bart Berger	<i>Denver, Col.</i>	88 Wall st.
Marshall Latham Bond	<i>New York City</i>	43 College st.
William Tillinghast Bull	<i>Newport, R. I.</i>	35 High st.
George Robert Carter	<i>Honolulu, H. I.</i>	43 College st.
William Clarke Catlin	<i>Providence, R. I.</i>	27 Lynwood st.
James Henry Coleman	<i>New York City</i>	62 w.

George David Colton	<i>Collinsville</i>	154 Humphrey st.
John Nesbitt Conyngham	<i>Wilkesbarre, Pa.</i>	120 High st.
Charles Edward Curtis	<i>New Haven</i>	138 Dwight st.
Richard Sydney Curtiss	<i>Stratford</i>	103 Wall st.
Jesse Chase Dann	<i>Buffalo, N. Y.</i>	36 Elm st.
Henry Lewis Davis	<i>Wallingford</i>	1010 Chapel st.
George Howard Davison	<i>New York City</i>	43 College st.
William Henry Davol, Jr.	<i>Brooklyn, N. Y.</i>	103 Wall st.
Carlton Melville DeWolf	<i>New York City</i>	389 Temple st.
Robert Russel Dickey	<i>Dayton, O.</i>	88 Wall st.
John Eufemio Dockendorff	<i>Brooklyn, N. Y.</i>	88 Wall st.
John Ambrose Doolittle	<i>New Haven</i>	219 Orange st.
John Feeter Easterbrook	<i>New Haven</i>	82 York sq.
Henry Hays Ellis	<i>Oxford, Me.</i>	8 Prospect pl.
Frank Harold Farquhar	<i>York, Pa.</i>	88 Wall st.
John Ellis Field	<i>Denver, Col.</i>	126 High st.
Richard Huntington Franchot	<i>Schenectady, N. Y.</i>	43 College st.
Pedro Florentino Francke	<i>New York City</i>	43 College st.
Deane Funk	<i>McLean, Ill.</i>	67 w.
Henry Kellogg Goetchius	<i>New York City</i>	43 College st.
James Douglas Gold	<i>West Cornwall</i>	65 Grove st.
Addison Graves	<i>New London</i>	85 w.
Franklin Moses Gray	<i>Chicago, Ill.</i>	46 Elm st.
Howard Greer, Jr.	<i>Chicago, Ill.</i>	6 Prospect pl.
Matthew Griswold, Jr.	<i>Erie, Pa.</i>	57 w.
Stephen Benedict Grummond, Jr.	<i>Detroit, Mich.</i>	395 Temple st.
Fred R. Hamlin	<i>Chicago, Ill.</i>	1179 Chapel st.
Charles Merritt Heminway	<i>Watertown</i>	1142 Chapel st.
Noble Foster Hoggson	<i>New Haven</i>	126 York st.
George Snowden Howland	<i>Newport, R. I.</i>	43 College st.
Howard Livingstone Isbell	<i>Union City</i>	6 Prospect pl.
Harry Garrybrant Jenner	<i>Dayton, O.</i>	125 Dwight st.
Harry Lydstone Johnson	<i>New Haven</i>	25 Eld st.
Cyrus Field Judson	<i>New York City</i>	43 College st.
George Converse Kimball	<i>Hartford</i>	64 w.
Felix Kleeberg	<i>New Haven</i>	14 Orange st.
Edward Lambert Leeds	<i>Stamford</i>	120 High st.
Thomas Albert Legler, Jr.	<i>Dayton, O.</i>	1182 Chapel st.
Louis LeSassier	<i>New Orleans, La.</i>	72 w.
Edwin Hoyt Lockwood	<i>New Canaan</i>	103 Wall st.
Samuel Harkness McCrea, Jr.	<i>Chicago, Ill.</i>	46 Elm st.
George Grant Mason	<i>Milburn, Ill.</i>	62 w.
William Smith Mason	<i>Milburn, Ill.</i>	62 w.
Charles Griffin Miller	<i>New Rochelle, N. Y.</i>	36 Elm st.
Edward Steward Moore	<i>New London</i>	409 Temple st.

James Augustus Nelson	<i>Bridgeport</i>	1010 Chapel st.
Edward Marshall Ney	<i>Hartford</i>	59 Prospect st.
Charles Norris, Jr.	<i>New York City</i>	71 w.
Elbert Ellsworth Norton	<i>New Haven</i>	33 Pearl st.
Selden Yale Osborn	<i>New Haven</i>	232 York st.
Edward Horatio Parker	<i>Detroit, Mich.</i>	43 College st.
Franklin T. Parlin	<i>Cassellton, Dakota</i>	1010 Chapel st.
Frank Wyman Parmerter	<i>Plattsburgh, N. Y.</i>	39 Lynwood st.
John Erskine Patrick	<i>Omaha, Nebr.</i>	64 High st.
Daniel Tucker Coffin Perkins	<i>San Francisco, Cal.</i>	36 Elm st.
Francis Cole Pratt	<i>Hartford</i>	36 Elm st.
John Goodell Prouty	<i>Spencer, Mass.</i>	46 Elm st.
George Brinckerhoff Richards	<i>New Haven</i>	313 York st.
Edwin Wright Robinson	<i>New Haven</i>	255 Ferry st.
Henry Charles Schwab	<i>Chicago, Ill.</i>	66 w.
Charles Kirtland Shelton	<i>Bridgeport</i>	1010 Chapel st.
Shiukichi Shigemi	<i>Imabari, Japan</i>	330 Orange st.
Orville Emerson Sloat	<i>New Haven</i>	170 York st.
Ernest Ellsworth Smith	<i>New Haven</i>	16 Hughes pl.
Percey Franklyn Smith	<i>New Haven</i>	13 Home pl.
Ralph Hebert Smith	<i>Waterbury</i>	389 Temple st.
Frederick William Spanutius	<i>New Haven</i>	180 Chestnut st.
Stanley Matthews Stagg	<i>Frankfort, Ky.</i>	201 Orange st.
Charles Weaver Stewart	<i>Newport, R. I.</i>	35 High st.
Howard Canning Taylor	<i>Green's Farms</i>	65 Grove st.
William Conquest Tucker	<i>New York City</i>	61 w.
Charles Alling Tuttle	<i>New Haven</i>	364 Orchard st.
Morgan Walcott	<i>New York City</i>	389 Temple st.
Charles Spencer Wells	<i>Southport</i>	86 Whitney av.
Ralph McIntosh Wilcox	<i>Portland</i>	59 Grove st.
Frank Clark Woodruff	<i>Orange</i>	41 High st.
JUNIORS, 88		

FRESHMAN CLASS

William Belknap Allen	<i>Pewee Valley, Ky.</i>	238 York st.
James Bradshaw Bailey	<i>Harrisburgh, Pa.</i>	1079 Chapel st.
Erdmann Dwight Baldwin	<i>Honolulu, H. I.</i>	421 Temple st.
Sherman Woodward Barken	<i>Woodbridge</i>	41 High st.
Louis Lawrence Barnum	<i>Thompsonville</i>	16 s. H.
William Bartlett Beckley	<i>New Haven</i>	300 Howard av.
Mark Spaulding Bradley	<i>East Jaffrey, N. H.</i>	136 College st.
William Dennison Breed	<i>Cincinnati, O.</i>	393 Temple st.

William Fances Breeze	<i>San Francisco, Cal.</i>	104 Wall st.
Bertram Loring Britton	<i>Cleveland, O.</i>	289 York st.
Frederick Willard Burgess	<i>New Haven</i>	Rock st., Westville
Elton Goodrich Burroughs	<i>New York City</i>	67 Howe st.
George Tyler Burroughs, Jr.	<i>Chicago, Ill.</i>	55 Trumbull st.
Henry Studley Burroughs	<i>Chicago, Ill.</i>	55 Trumbull st.
Frank Arthur Busse	<i>New Haven</i>	3 Ridge st.
Perry Moore Caldwell	<i>Wheeling, W. Va.</i>	203 York st.
Jay Freeborn Carlisle	<i>Brooklyn, N. Y.</i>	7 Library st.
William Darrow Carter	<i>Waterbury</i>	38 High st.
Arthur Sanford Cheney	<i>New Haven</i>	45 Elm st.
Tecumseh Sherman Clark	<i>Pittsburgh, Pa.</i>	393 Temple st.
William Shiner Clawson	<i>Woodstown, N. J.</i>	1079 Chapel st.
William Hillard Conyngham	<i>Wilkes-Barre, Pa.</i>	120 High st.
Frank Marcus Cooper	<i>Kingston, Pa.</i>	395 Temple st.
Louis Julius Curtis	<i>Stamford</i>	109 York st.
Arthur Herbert Day	<i>New Haven</i>	310 York st.
Edward Hangary Day	<i>New Albany, Ind.</i>	393 Temple st.
Philip James Deering	<i>Portland, Me.</i>	238 York st.
Edwin Kirk Dillingham	<i>New Orleans, La.</i>	157 Orange st.
Louis Coert DuBois	<i>Hudson, N. Y.</i>	1169 Chapel st.
Frederick Howard Ellsworth	<i>Hartford</i>	1 Whalley av.
Harootum Enfiajian	<i>Harpoot, Turkey</i>	92 York sq.
Edward Everest	<i>Newark, N. J.</i>	90 Wall st.
Willis Judson Fenn	<i>Plymouth</i>	24 Dow st.
William Irving Ferrey	<i>Pittsfield, Mass.</i>	31 Trumbull st.
Theron Rockwell Field	<i>New York City</i>	154 Grove st.
Lloyd Wiegand Fisher	<i>Westtown, N. Y.</i>	339 Prospect st.
Hugh Neely Fleming	<i>Erie, Pa.</i>	393 Temple st.
Lewis Brown Gawtry	<i>New York City</i>	109 Wall st.
Harry Cromwell Gibbons	<i>Middletown</i>	59 Prospect st.
George Frank Goodale	<i>New Haven</i>	6 Prospect pl.
George Dexter Gregory	<i>Brooklyn, N. Y.</i>	337 Orange st.
Louis Montrose Haight	<i>Alameda, Cal.</i>	82 Wall st.
Henry Pierce Hall	<i>San Francisco, Cal.</i>	425 Temple st.
John Augustus Hartwell	<i>Unionville, N. Y.</i>	128 Temple st.
Leland Howard	<i>Hartford</i>	64 w.
Arthur Grant Huntington	<i>Cleveland, O.</i>	77 w.
Gustave Erwin Huttelmaier	<i>Knoxville, Tenn.</i>	128 Temple st.
Adrian Muller Isham	<i>Englewood, N. J.</i>	17 College st.
Arthur Wiswell Jepson	<i>New Haven</i>	30 Grove st.
John Henry Klock, Jr.	<i>New Haven</i>	1201 Chapel st.
Edwin Forrest Landy	<i>Cincinnati, O.</i>	101 w
Columbus Carlton Lee	<i>Cleveland, O.</i>	285 York st.
Eugène Lentilhon	<i>New York City</i>	55 w.

George Alfred Lund	<i>West Stratford</i>	<i>West Stratford</i>
David Lyman	<i>Middlefield</i>	128 High st.
Boynton Wells McFarland	<i>New Haven</i>	67 Mansfield st.
Frank Aloysius Maloney	<i>New Haven</i>	34 Ferry st.
Kingsley Walton Martin	<i>Staten Island, N. Y.</i>	133 College st.
Frederic Bausman Mathews	<i>Philadelphia, Pa.</i>	44 Elm st.
Ferris Jacobs Meigs	<i>New York City</i>	24 Home pl.
George Wellington Miles, Jr.	<i>Milford</i>	Milford
John Raymond Mitchell	<i>Franklin, Pa.</i>	46 Elm st.
Augustus René Moën	<i>New York City</i>	109 Wall st.
Edwin Morrison	<i>Cincinnati, O.</i>	59 w.
Thomas Hunter Morrison	<i>Cincinnati, O.</i>	59 w.
William Brewster Morrison	<i>Willimantic</i>	134 College st.
William Belknap Newberry	<i>New Haven</i>	73 Whitney av.
Roger Samuel Newell	<i>Bristol</i>	103 Park st.
Edwin Oppenheimer	<i>New Haven</i>	78 Lyon st.
Frank Lee Owen	<i>Oakland, Cal.</i>	82 Wall st.
Gains Foster Paddock	<i>St. Louis, Mo.</i>	175 Oak st.
Kenyon Vickers Painter	<i>Cleveland, O.</i>	155 Elm st.
William Henry Pierce	<i>South Britain</i>	40 Lynwood st.
Henry Adams Plumer	<i>Philadelphia, Pa.</i>	46 Elm st.
John Francis Poëy	<i>Havana, Cuba</i>	55 Prospect st.
Edwin Read	<i>Brooklyn, N. Y.</i>	1079 Chapel st.
Irwin Rew	<i>Chicago, Ill.</i>	90 Wall st.
Henry Work Rianhard	<i>New York, City</i>	133 College st.
Paul Skiff Robinson	<i>New Haven</i>	137 Edwards st.
James Woodrow Ruthven	<i>Scranton, Pa.</i>	136 College st.
Alfred Schwab	<i>Chicago, Ill.</i>	66 w.
Ernest Elisha Severy	<i>Waterbury</i>	226 Crown st.
Paul Sheaffer	<i>Pottsville, Pa.</i>	105 Wall st.
Frederick Robinson Shepard	<i>Minneapolis, Minn.</i>	68 w.
Arthur Bertram Skelding	<i>Riverside</i>	65 Grove st.
Albert Kingsley Spencer	<i>Cleveland, O.</i>	68 w.
George Jarvis Spencer	<i>Old Saybrook</i>	411 Temple st.
Charles Emerson Stone	<i>Spencer, Mass.</i>	143 York st.
Lewis Hobart Sweetser	<i>San Francisco, Cal.</i>	393 Temple st.
Henry Hutchins Sykes	<i>New Haven</i>	114 High st.
Lorin Edward Taft	<i>Chicago, Ill.</i>	104 Wall st.
Abraham Louis Thalheimer	<i>New Haven</i>	100 St. John st.
Benjamin Comfort Thomas	<i>Columbus, Ind.</i>	38 Elm st.
Harry George Tombler	<i>Easton, Pa.</i>	1079 Chapel st.
Charles Newman Traver	<i>Hudson, N. Y.</i>	137 College st.
Clarence Beecher Twitchell	<i>New Haven</i>	68 Asylum st.
Harry Mighels Verrill	<i>Portland, Me.</i>	86 Whalley av.
William Walker Weare	<i>Chicago, Ill.</i>	154 Grove st.

Robert Taylor Wheeler	<i>Jersey City, N. J.</i>	84 Wall st.
Guthrie Minor Wilson	<i>Bardstown, Ky.</i>	393 Temple st.
John Albert Woodruff	<i>Windsor Locks</i>	55 Prospect st.
Bertram G. Work	<i>Akron, O.</i>	1179 Chapel st.
William Charles Wurtenberg	<i>Willink, N. Y.</i>	64 State st.
Thomas Henry Yardley	<i>Newport, R. I.</i>	143 College st.

FRESHMEN, 104

SPECIAL STUDENTS NOT CANDIDATES FOR A DEGREE

Edmund Brown	<i>Norfolk</i>	233 York st.
Joseph Stanley Brown	<i>Washington, D. C.</i>	14 S. H.
Abner Reeder Chambers	<i>Trenton, N. J.</i>	118 York st.
Louis Stanley Ferry	<i>New Haven</i>	261 Crown st.
Willis Phelps	<i>Springfield, Mass.</i>	53 Prospect st.
Warren A. Spalding	<i>New Haven</i>	89 Church st.

SPECIAL STUDENTS, 6

SUMMARY

GRADUATES	.	.	.	.	.	.	23
SENIORS	.	.	.	.	.	.	58
JUNIORS	.	.	.	.	.	.	88
FRESHMEN	.	.	.	.	.	.	104
SPECIAL	.	.	.	.	.	.	6

279

SCHOOL OF THE FINE ARTS

Maud A. Allan	<i>New Haven</i>
M. Ona. Banks	<i>New Haven</i>
Jas. A. Barkentin	<i>New Haven</i>
Nettie E. Barnum	<i>New Haven</i>
Frank C. Boardman	<i>Cromwell •</i>
Annie D. Bradley	<i>New Haven</i>
Robert F. Brainerd	<i>Westchester</i>
Susan J. Candee	<i>New Haven</i>
Mary F. Carew	<i>New Haven</i>
Charles F. Carter	<i>Waterbury</i>
Helen E. Chase	<i>Waterbury</i>
Ernest F. Coe	<i>New Haven</i>
Genevieve A. Cowles	<i>Farmington</i>
Maud A. Cowles	<i>Farmington</i>
Clara R. Durgy	<i>New Haven</i>
Elizabeth T. Fitch	<i>New Haven</i>
Christian G. Gunther, Jr.	<i>Stratford</i>
Irving E. Hurlbut	<i>New Haven</i>
Charles G. Lane	<i>Sandusky, O.</i>
Christophia Leffingwell	<i>New Haven</i>
Josephine M. Lewis	<i>New Haven</i>
Clara B. Lines	<i>Meriden</i>
Virginia B. Means	<i>New Haven</i>
Minnie L. Miles	<i>Milford</i>
Eleanor Munger	<i>New Haven</i>
Elizabeth S. Newberry	<i>New Haven</i>
Etta F. Osborne	<i>Wallingford</i>
Elizabeth S. Pitman	<i>New Haven</i>
Martha J. Potter	<i>New Haven</i>
Bela L. Pratt	<i>Salem</i>
Annie C. Punderford	<i>New Haven</i>
Ida Rogowski	<i>New Haven</i>

Elsie Rowland	<i>Waterbury</i>
Jessie B. Sherman	<i>Whitneyville</i>
Clara E. Smith	<i>Northford</i>
Harriet E. Smith	<i>Ansonia</i>
Effie H. Sperry	<i>New Haven</i>
Clara L. Thayer	<i>W. Medway, Mass.</i>
Albert G. Thompson	<i>Fair Haven</i>
Thos. P. Waring	<i>Savannah, Ga.</i>
C. Louise Weir	<i>New Haven</i>
Helen M. Winchell	<i>New Haven</i>
Fannie L. Wiseman	<i>New Haven</i>
Jennie J. Wooding	<i>Stratford</i>

Art Students,	44
Special Undergraduate Students in Drawing,	103
Total number of students receiving instruction in the	
Art School,	147

DEPARTMENT OF THEOLOGY

(YALE DIVINITY SCHOOL)

RESIDENT LICENTIATES

ATTENDING LECTURES

Miles Gaylord Bullock, PH.D. } and B.A. Syracuse University	<i>Syracuse, N. Y.</i>	49 E.
Charles Henry Caton, B.A. } Butler University, 1876	<i>Harrodsburg, Ky.</i>	40 E.
Festus Foster, B.A. } University of Kansas, 1882	<i>Topeka, Kan.</i>	331 Orange st.

RESIDENT LICENTIATES, 3

GRADUATE CLASS,

PURSUING FOURTH YEAR STUDIES

John Allender, B.D. } Chicago Theol. Seminary, 1868	<i>New Haven</i>	68 W.
Edwin Stukely Carr, B.D. } Yale University, 1885, B.A. Knox College, 1882	<i>Galesburg, Ill.</i>	108 W.
Mark Wilson Chunn, B.D. } Yale University, 1886, B.A. West. Maryland College, 1882	<i>Mechanicsville, Md.</i>	34 E.
George Rudolph Freeman, B.D. } Yale Univ. 1885, M.A. Penns. Coll. 1879 (<i>On the Hooker Fellowship</i>).	<i>Gettysburg, Pa.</i>	Berlin, Germany
Frederick Arthur Gaylord, B.D. } Yale Univ. 1886, M.A. Amherst Coll. 1883 (<i>On the Fellowship of 1880</i>)	<i>South Hadley, Mass.</i>	13 E.
Clarence De Vere Greeley, B.D. } Yale University, 1886, B.A. Washburn College, 1883	<i>Clymer, N. Y.</i>	75 W.
John Pierpont, B.D. } Yale Univ. 1886, B.A. Yale Univ. 1883	<i>New Haven</i>	9 Argyle st.

Frank Chamberlain Porter, B.D. } Yale University, 1886, M.A. Beloit College, 1886	<i>Beloit, Wisc.</i>	99 W.
Frederick Thomas Rouse, } Hartford Theol. Seminary, B.A. Amherst College, 1882	<i>Portland, Me.</i>	105 W.
Frederick Lorenzo Stevens, B.D. } Yale Univ. 1885, B.A. Ollvet Coll. 1882 (On the Hooker Fellowship)	<i>Winona, Minn.</i>	103 W.

GRADUATE CLASS, 10

SENIOR CLASS

James Wilson Bixler, B.A. } Amherst College, 1882	<i>Hanover, Pa.</i>	107 W.
Avedis Mesrob Boolgoorjoo, } Marash Theol. Seminary	<i>Marash, Turkey</i>	23 E.
Henry Eldridge Bourne, B.A. } Yale University, 1883	<i>Sharon</i>	36 E.
Howard Allen Bridgman, B.A. } Amherst College, 1883	<i>Northampton, Mass.</i>	110 W.
James Franklin Cross, B.A. } Western Reserve Univ., 1884	<i>Hudson, O.</i>	102 W.
James Wallace Dow, } Queen's University	<i>Kingston, Ont., Canada</i>	118 W.
Alexander Erskine Duncan, M.A. } McGill University, 1876	<i>Montreal, Canada</i>	117 W.
John Dunlap, B.A. } College of New Jersey, 1882	<i>Deerfield, N. Y.</i>	89 W.
Walter March Ellis, B.A. } Tabor College, 1882	<i>Nevinville, Iowa</i>	27 E.
Henry Martyn Herrick, B.A. } Amherst College, 1884	<i>Rockford, Ill.</i>	14 E.
Horace George Hoadley, B.A. } Yale University, 1883	<i>New Haven</i>	104 W.
John Morris James, } Brecon College, 1884	<i>Ferndale, South Wales</i>	44 E.
George William Judson, B.A. } Yale University, 1884	<i>Stratford</i>	21 E.
Franklin Pierce Lynch, B.A. } University at Lewisburg, 1884	<i>Philadelphia, Pa.</i>	81 W.
John McKee, B.A. } Butler University, 1884	<i>Trinity Springs, Ind.</i>	115 Elm st.
George Raynolds Mathews, B.A. } Western Reserve University, 1884	<i>Painerville, O.</i>	120 W.
Robert Calfe Morse, B.A. } Knox College, 1884	<i>Tremont, Ill.</i>	114 W.

John Henry Müller, B.A. } Lebanon Valley College, 1884 }	<i>Zurich, Switzerland</i>	82 W.
Rikizo Nakashima, B.A. } Western Reserve University, 1884 }	<i>Kiyoto, Japan</i>	109 W.
Edward Smith Parsons, M.A. } Amherst College, 1883 }	<i>Brooklyn, N. Y.</i>	78 W.
George Foster Prentiss, B.A. } Amherst College, 1884 }	<i>Windham, Vt.</i>	73 W.
Orrin Lucius Robinson, B.L. } Carleton College, 1883 }	<i>Plainview, Minn.</i>	32 E.
Dwight Clinton Stone	<i>Bethlehem</i>	17 E.
Ward Taylor Sutherland, M.A. } University of Rochester, 1878 }	<i>Rochester, N. Y.</i>	87 W.
Ervin Llewellyn Thorpe, PH.D. } and B.A. Syracuse Univ. }	<i>Fayette, Iowa</i>	100 Howe st.
Henry Seibels Wannamaker, B.A. } Wofford College, 1884 }	<i>Orangeburg, S. C.</i>	88 W.
Charles Terrill Whittlesey, B.A. } Amherst College, 1883 }	<i>Hotchkissville</i>	112 W.

SENIOR CLASS, 27

MIDDLE CLASS

Francis Peck Bachelor, B.A. } Yale University, 1885 }	<i>Norwich Town</i>	51 E.
Edgar Irving Brenner, B.A. } Pennsylvania College, 1885 }	<i>Smithsburg, Md.</i>	98 W.
Clarence Talmage Brown, B.A. } Ohio Wesleyan University, 1880 }	<i>Chesterville, O.</i>	80 W.
Lewin Frank Buell, B.A. } Yale University, 1885 }	<i>Madison</i>	29 E.
Empson Cory, B.A. } Wabash College, 1885 }	<i>Crawfordsville, Ind.</i>	97 W.
William Watts Davidson, B.A. } Yadkin College, 1880 }	<i>Company Shops, N. C.</i>	95 W.
Henry Davies, } Cheshunt College }	<i>London, England</i>	90 W.
Charles Allen Dinsmore, } Kentucky University }	<i>Stowe, Vt.</i>	18 E.
Frederick Davis Greene, B.A. } Amherst College, 1885 }	<i>Constantinople, Turkey</i>	54 E.
John Edward Herman, } Union Biblical Institute }	<i>Warsaw, N. Y.</i>	19 E.
Lewis Franklin John, B.A. } Otterbein University, 1883 }	<i>Dayton, O.</i>	38 E.

Gerald Stanley Lee, B.A. } Middlebury College, 1885 }	<i>Brattleboro', Vt.</i>	79 W.
Frank Fales Lewis, B.A. } Beloit College, 1884 }	<i>Stillman Valley, Ill.</i>	25 E.
Charles Loomis, B.A. } Amherst College, 1882 }	<i>Charlestown, O.</i>	84 W.
Frank Ranney Luckey, B.S. } Cornell University, 1882 }	<i>Poughkeepsie, N. Y.</i>	320 Elm st.
Robert Luvern Marsh, B.A. } Nebraska University, 1884 }	<i>Lincoln, Nebr.</i>	445 George st.
Philip Hannibal Mason, B.A. } Carleton College, 1883 }	<i>Vermillion, Ill.</i>	39 Whalley av.
Alexander Milne	<i>Westerly, R. I.</i>	42 E.
Henry Harvey Morse, B.A. } Amherst College, 1885 }	<i>Plantsville</i>	20 E.
Wallace Claire Payne, B.A. } Bethany College, 1886 }	<i>South Bend, Ind.</i>	96 W.
Lyman Plimpton Peet, B.A. } Yale University, 1885 }	<i>West Haven</i>	15 E.
James Bronson Reynolds, B.A. } Yale University, 1884 }	<i>North Haven</i>	83 W.
Charles Nichols Severance, } Hamilton College }	<i>Mexico, N. Y.</i>	1306 State st.
Jonathan Green Smith, B.A. } Oberlin College, 1885 }	<i>Oberlin, O.</i>	41 E.
Frank Varnum Stevens, B.A. } Carleton College, 1884 }	<i>Vermontville, Mich.</i>	94 W.
Lucius Harrison Thayer, B.A. } Amherst College, 1882 }	<i>Westfield, Mass.</i>	111 W.
John Oliver Thrush, B.A. } Lebanon Valley College, 1884 }	<i>Ridgeville, W. Va.</i>	33 E.
Frank VanAllen, B.A. } Yale University, 1885 }	<i>Chicago, Ill.</i>	15 E.
Henry Horace Williams, M.A. } University of North Carolina, 1883 }	<i>Sunbury, N. C.</i>	113 W.
John Churchwood Wilson, B.A. } Amherst College, 1885 }	<i>Philadelphia, Pa.</i>	76 W.
George Heber Woodhull, B.A. } Yale University, 1885 }	<i>Middlefield, Mass.</i>	45 E.
MIDDLE CLASS, 31		

JUNIOR CLASS

George Page Anderson, B.A. } Whitman College, 1886 }	<i>Walla Walla, Wash. Terr.</i>	22 E.
Theodore Davenport Bacon	<i>New Haven</i>	121 W.
Eli Beers, B.A. } Yale University, 1886 }	<i>Bridgewater</i>	28 E.

George Alexander Blair, B.A. } McGill University, 1886	Manotik, Ont., Canada	115 W.
Edward Mortimer Chapman, B.A. } Yale University, 1884	Old Saybrook	24 E.
Charles Franklin Clarke, B.A. } Yale University, 1886	Columbia	31 E.
Harlan Creelman, } University of New Brunswick	York, Me.	30 E.
Olaus Dahl, B.A. } Luther College, 1885	Lochiel, Wisc.	106 W.
George Pomeroy Eastman, B.A. } Amherst College, 1884	Framingham, Mass.	35 E.
John Lockwood Gentle, B.A. } University of Indiana, 1884	Southport, Ind.	47 E.
Charles Andrew Greenlees, B.A. } Washburn College, 1886	Glen Sharvald, Kan.	74 W.
William Griffiths, } Carmarthen College, 1886	Cwmlllynfell, South Wales	50 E.
Albert Wellman Hitchcock, M.A. } Amherst College, 1882	Kalamazoo, Mich.	26 E.
D. Melancthon James, B.A. } Randolph Macon College, 1881	Baltimore, Md.	93 W.
William Henry Klose, B.A. } Roanoke College, 1886	Mifflensburg, Pa.	53 E.
William Albert Lane, B.A. } Brown University, 1886	Philadelphia, Pa.	8 E.
Luther Kendall Long, PH.B } Adrian College, 1883	Strong City, Kan.	331 Orange st.
John Frederick Nicholas, B.A. } Muhlenberg College, 1886	Butztown, Pa.	92 W.
Manly Dayton Ormes, B.A. } Yale University, 1885	Tuscola, Mich.	156 Grove st.
Manasseh Garabed Pappazian, B.A. } Central Turkey College, 1882	Aintab, Turkey	53 E.
Chas. Benjamin Franklin Pease, B.A. } Williams College, 1886	Buskirks, N. Y.	82 W.
Edward Wright Peet, B.A. } Yale University, 1886	West Haven	31 E.
George Petry, B.A. } University of Pennsylvania 1886	Philadelphia, Pa.	10 E.
Arthur Stevens Phelps, B.A. } Yale University, 1886	New Haven	44 High st.
John Dumont Reid	Indianapolis, Ind.	122 W.
James Gibson Robertson, B.A. } Williams College, 1886	Salem, N. Y.	12 E.
Frank Knight Sanders, B.A. } Ripon College, 1882	Lakeville	70 W.
Charles Colebrook Sherman, B.A. } Yale University, 1883	Syracuse, N. Y.	48 E.

1886-87]

Junior Class

193

Frank Robinson Shipman, B.A. } Yale University, 1885	<i>Hartford</i>	46 E.
Henry Stauffer, } Otterbein University	<i>Denver, Col.</i>	106 W.
Henry William Tuttle, B.A. } Williams College, 1886	<i>Otisco, N. Y.</i>	6 E.
Walter Shepard Ufford, M.A. } Amherst College, 1882	<i>Boston, Mass.</i>	26 E.
Howard Ridgway Vaughn, B.A. } Wesleyan University, 1886	<i>New Egypt, N. Y.</i>	2 E.
Dean Augustus Walker, B.A. } Yale University, 1884	<i>Auburndale, Mass.</i>	43 E.
Frank Palmer Waters, B.A. } Madison University, 1883	<i>Hadlyme</i>	37 E.
William Wiedenhoeft, B.A. } Oberlin College, 1886	<i>Belden, Ind.</i>	123 W.
Mesrob Aram Yeshilian, } Euphrates College	<i>Harpoot, Turkey</i>	91 W.

JUNIOR CLASS, 37

SUMMARY

RESIDENT LICENTIATES,	3
GRADUATE CLASS,	10
SENIOR CLASS,	27
MIDDLE CLASS,	31
JUNIOR CLASS,	37
TOTAL,	108

DEPARTMENT OF MEDICINE

(YALE MEDICAL SCHOOL)

GRADUATE STUDENT

Oliver Thomas Osborne, M.D. } Yale University, 1884	<i>New Haven</i>	111 York st.
--	------------------	--------------

SENIOR CLASS

George Frederick Converse	<i>New Haven</i>	38 Lynwood st.
Augustin Averill Crane, B.A. } Yale University, 1885	<i>New Haven</i>	213 Orange st.
Edward Michael McCabe, B.A. } Manhattan College, 1884	<i>New Haven</i>	47 Washington st.
Stephen John Maher	<i>New Haven</i>	203 East st.
James DeSault Odell	<i>New York City</i>	112 Davenport av.
SENIOR CLASS, 5		

MIDDLE CLASS

Edward Charles Beach	<i>Seymour</i>	70 Howe st.
Robert Seymour Bradley, B.A. } Yale University, 1885	<i>New Haven</i>	141 Orange st.
Wilmot Valentine Bradley, D.D.S. } University of Pennsylvania, 1886	<i>Westville</i>	775 Chapel st.
Thomas Matthew Cahill	<i>New Haven</i>	227 Franklin st.
Charles Ross Jackson	<i>New Haven</i>	158 York st.
Warren Chamberlain McFarland	<i>New Haven</i>	67 Mansfield st.
Harry Ranney Stiles	<i>Middletown</i>	213 Orange st.
Joseph Hendley Townsend, B.A. } Yale University, 1885	<i>New Haven</i>	45 Martin st.
Frank Van Allen, B.A. } Yale University, 1885	<i>Ravenswood, Ill.</i>	15 E.
MIDDLE CLASS, 9		

JUNIOR CLASS

William Peck Andrews	<i>West Haven</i>	96 Howe st.
Louis Bennett Bishop, B.A. } Yale University, 1886	<i>New Haven</i>	215 Church st.
Thomas Stoddard Bronson, PH.B. } Yale University, 1886	<i>New Haven</i>	1460 Chapel st.
Herbert Martin Clapp	<i>New Haven</i>	24 Lincoln st.
Alfonso Clemens Czibulka	<i>Bridgeport</i>	
G. Skiff Ford	<i>New Haven</i>	55 Silver st.
Daniel Albion Jones, B.A. } Yale University, 1884	<i>East Haven</i>	746 Chapel st.
Moses Kleiner	<i>New Haven</i>	108 George st.
William Harvey Stowe	<i>New Haven</i>	1575 Chapel st.
George Austin Williams	<i>New Haven</i>	329 State st.

JUNIOR CLASS, 10

SPECIAL STUDENTS

James Wallace Dow	<i>Kingston, Ont., Canada</i>	118 W.
William Fletcher Stone	<i>New Haven</i>	143 Lamberton st.

SUMMARY

GRADUATE STUDENT,	.	.	.	.	.	.	1
SENIOR CLASS,	.	.	.	.	.	.	5
MIDDLE CLASS,	.	.	.	.	.	.	9
JUNIOR CLASS,	.	.	.	.	.	.	10
SPECIAL STUDENTS,	.	.	.	.	.	.	2
TOTAL,	.	.	.	.	.	.	27

DEPARTMENT OF LAW

(YALE LAW SCHOOL)

SENIOR CLASS

Visscher Vere Barnes, } Attorney at Law	<i>De Smet, Dakota</i>	West Haven
Charles Russell Burnham	<i>Hartford</i>	1010 Chapel st.
William George Buteau, } B.A. Jollette Coll., 1884	<i>Providence, R. I.</i>	16 Orange st.
James Nicholas Cannon	<i>New Haven</i>	228 Hamilton st.
Prentice William Chase	<i>New Haven.</i>	281 Dixwell av.
George Ashbille Clark	<i>Meriden</i>	Meriden
Leonard Mayhew Daggett, B.A. } Yale University, 1884	<i>New Haven</i>	60 Wall st.
Edward Downes	<i>New Haven</i>	103 Howe st.
Horace Sherman Eaton	<i>Chaplin</i>	1150 Chapel st.
Jacob Philip Goodhart, PH.B. } Yale University, 1885	<i>New Haven</i>	267 Wooster st.
John Harrison, B.A. } Pritchett School Institute 1885	<i>Glasgow, Mo.</i>	106 York sq. pl.
Charles Henry Hayden	<i>Winsted</i>	476 Chapel st.
Frederick Whittlesey Hilliard	<i>Plymouth</i>	24 Dow st.
Carleton Edson Hoadley	<i>Plymouth</i>	24 Dow st.
Benjamin Franklin James, B.A. } University of Chicago 1884	<i>Mt. Gilead, O.</i>	335 George st.
James Benjamin Keogh, B.A. } Yale University, 1885	<i>Chicago, Ill.</i>	64 High st.
Orison Perry Lee, M.A. } Kansas Coll., 1887, Attorney at Law	<i>Seattle, Wash. T.</i>	3 College st.
Warner Thornton McGuinn, B.A. } Lincoln University 1884	<i>Baltimore, Md.</i>	12 Martin st.
James Henry O'Rourke	<i>Bridgeport</i>	Bridgeport
Edward Isaac Sanford, Jr., B.A. } Yale University, 1884	<i>New Haven</i>	538 Chapel st.
Bradley Varnum Sargent, Jr., S.M. } Santa Clara College, 1885	<i>Monterey, Cal.</i>	505 Chapel st.
Shunzo Sawada, } Advocate, Tokio Univ.	<i>Tokio, Japan</i>	254 Crown st.
Harry Morgan Stanley	<i>Henderson, Ky.</i>	228 Crown st.
Eli Frank Thompson, } Attorney at Law	<i>Chicago, Ill.</i>	1142 Chapel st.
Eben Whitney, Jr.	<i>Glassboro, N. J.</i>	37 Lynwood st.
Frederic Meeker Williams	<i>New Preston</i>	1150 Chapel st.
Isaac Wolfe	<i>New Haven</i>	88 Crown st.

JUNIOR CLASS

Edward Arthur Baldwin	<i>Princeton, Ill.</i>	125 Greene st.
Frederick Augustus Bartlett	<i>Canaan</i>	202 Wooster st.
Silas Warren Bartlett, PH.B. } Yale University, 1886	<i>New Haven</i>	1441 Chapel st.
Benjamin B. Beekman, B.A. } Oregon State Univ. 1884	<i>Jacksonville, Oreg.</i>	163 Orange st.
Henry William Blake, PH.B. } Yale University, 1886	<i>New Haven</i>	361 Temple st.
John Marvin Blakeley, PH.B. } Yale University, 1886	<i>St. Paul, Minn.</i>	44 Elm st.
Wilbur Franklin Booth, B.A. } Yale University, 1884	<i>New Haven</i>	223 York st.
Edward Newton Brandegee, B.A. } Yale University, 1886	<i>Berlin</i>	395 Temple st.
Hubert Wilson Butler	<i>Des Moines, Iowa</i>	128 High st.
Florence Clohessey, B.A. } Toronto University, 1886	<i>Waterbury</i>	297 George st.
James Lewis Cowles, B.A. } Yale University, 1886	<i>Farmington</i>	124 High st.
Clarence Eugene Cundall	<i>Danielsonville</i>	98 Day st.
William Erwin Davis	<i>New Haven</i>	80 Prince st.
Thomas Mills Day, Jr., B.A. } Yale University, 1886	<i>Hartford</i>	1010 Chapel st.
William Eugene Dibble	<i>Sandy Hill, N. Y.</i>	3 College st.
John Thomas Fitzgerald	<i>New Haven</i>	16 Orange st.
Charles Jared Griggs, B.A. } Yale University, 1886	<i>Waterbury</i>	391 Temple st.
Stevie Michel Hoyer	<i>New Haven</i>	19 Elm st.
James Faucett Hunt	<i>Hammondsport, N. Y.</i>	109 Elm st.
Patrick Kane	<i>Bridgeport</i>	Bridgeport
Frank Harrison Kelley, Jr.	<i>New Haven</i>	20 Pearl st.
Joseph Clement Lawler, B.A. } Georgetown College, 1885	<i>P. du Chien, Wisc.</i>	71 Whalley av.
Iver Norman Lawson	<i>Chicago, Ill.</i>	126 Wall st.
Daniel Everitt Leary	<i>Enfield</i>	978 Chapel st.
Edward Fox Lewis	<i>Waterbury</i>	126 Wall st.
Thomas Patrick McCue	<i>Danbury</i>	159 York st.
Allen McQuillan	<i>St. Paul, Minn.</i>	1136 Chapel st.
Kojiro Matsugata	<i>Tokio, Japan</i>	70 Grove st.
Porter Cooper Moulton	<i>New Haven</i>	228 Mansfield st.
Frank George Peters, B.A. } Yale University, 1886	<i>Syracuse, N. Y.</i>	223 York st.
Frederic Hopkins Pomroy	<i>Lockport, N. Y.</i>	56 w.
William Adams Potter	<i>New Haven</i>	723 Elm st.
Clement Darling Rinehart	<i>Fredericktown, O.</i>	421 Temple st.
George Washington Robinson	<i>New Haven</i>	137 Edwards st.

James Edward Russell, B.A. } St. Johns College, 1886	<i>Waterbury</i>	297 George st.
Arthur Leffingwell Shipman, B.A. } Yale University, 1886	<i>Hartford</i>	46 E.
Robert Wright Stewart, B.S. } Coe College, 1886	<i>Cedar Rapids, Ia.</i>	421 Temple st.
Lyman Twining Tingier	<i>Thompson</i>	67 Howe st.
Soichi Tsuchiya	<i>Tokio, Japan</i>	27 College st.
William Frederick Vogt	<i>Tyrone, Pa.</i>	159 York st.
Bacon Wakeman	<i>Fairfield</i>	Fairfield
Howard Nichols Wakeman	<i>Fairfield</i>	Bridgeport
Allan Herbert Willett, B.A. } Brown University, 1886	<i>Suffield</i>	978 Chapel st.
JUNIOR CLASS, 43		

GRADUATE STUDENTS

Henry Philip Farnham, LL.B. } National University, 1885	<i>Palmyra, N. Y.</i>	335 George st.
Charles Burnell Hawkes, LL.B. } Yale University, 1883	<i>New Haven</i>	314 Crown st.
John McKean, LL.B. } Yale University, 1886	<i>Madison</i>	189 Church st.
Seijiro Sho, LL.B. } Tokio University, 1885	<i>Tokio, Japan</i>	254 Crown st.
Ervin Llewellyn Thorpe, LL.B. } Iowa State Univ., 1879	<i>Fayette, Iowa</i>	100 Howe st.
George Dutton Watrous, M.L. } Yale University, 1884	<i>New Haven</i>	24 College st.

GRADUATE STUDENTS, 6

SPECIAL STUDENTS

Stanford Tappan Crapo, B.A. } Yale University, 1886	<i>New Bedford, Mass.</i>	15 S.
William Marshall Johnson	<i>Richmond, Va.</i>	111 Day st.
Wallace Percy Knapp, B.A. } Yale University, 1886	<i>New York City</i>	1173 Chapel st.

SPECIAL STUDENTS, 3

SUMMARY

SENIORS,	27
JUNIORS,	43
GRADUATE STUDENTS,	6
SPECIAL STUDENTS,	3
TOTAL,	79

SUMMARY OF STUDENTS

DEPARTMENT OF PHILOSOPHY AND THE ARTS:

GRADUATE COURSES	-	-	-	56
YALE COLLEGE	-	-	-	570
SHEFFIELD SCIENTIFIC SCHOOL	-			279
ART SCHOOL	-	-	-	44
				<hr style="width: 10%; margin-left: auto; margin-right: 0;"/> 949
YALE DIVINITY SCHOOL	-	-	-	108
YALE MEDICAL SCHOOL	-	-	-	27
YALE LAW SCHOOL	-	-	-	79
				<hr style="width: 10%; margin-left: auto; margin-right: 0;"/>
				1163
Deduct for names inserted twice	-			29
				<hr style="width: 10%; margin-left: auto; margin-right: 0;"/>
TOTAL	-	-	-	1134

DEGREES CONFERRED IN 1886

BACHELORS OF ARTS

Charles Francis Adams	Charles Nelson Coddington
John Charles Adams	Austen Colgate
Norman Ilsley Adams	Sidney Morse Colgate
Warren Austin Adams	Michael Francis Connor
Joseph Lincoln Adler	Francis Rexford Cooley
Zachariah Nelson Allen	John Joseph Corkery
Arthur Nathaniel Alling	Gibbons Gray Cornwell
Henry Semple Ames	Alfred Cowles, Jr.
Paul Kimball Ames	Stanford Tappan Crapo
William Burrall Anderson	William Randall Crawford
Benjamin Harris Anthony	William Williams Crehore
Robert Appleton	Thomas Darling
Bartlett Arkell	Benjamin Joseph Davis
Harvey Brown Bashore	Thomas Mills Day, Jr.
Everett Alanson Bates	Calvin Dickey
John Beadle	Judson Schultze Dutcher
Porter Beardsley	Percy Edgar
Eli Beers	George Edwin Eliot, Jr.
Daniel Doane Bidwell	Abraham Lincoln Fellows
Louis Bennett Bishop	George Otis Fellows
George Hathaway Bixby	Richard Thomas Francke
Edward Newton Brandegee	William Morgan Gallup
William Partridge Brandegee	Arthur Goebel
Samuel Kimball Bremner	Nicholas Minor Goodlett, Jr.
Joseph Sharswood Brinton	Chauncey William Goodrich
Cornelius Gardner Bristol	William Burton Goodwin
Henry Stanford Brooks, Jr.	Willis Horace Goodyear
William Adams Brown	Louis Moen Grant
Carl Darling Buck	Walter Greenwood Graves
Wilson Lee Cannon, Jr.	John King Griffith
William White Capron	Charles Jared Griggs
Theophilus Ransom Carter	Lewis Birely Hamilton
Wilson Catherwood	Charles Edward Hellier
Lawrence William Churchill	Ralph Hickox
Charles Franklin Clarke	Henry Ewing Hord

Frederick Buell Hungerford	Charles Wheeler Pierson
Washington Irving Hunt	Robert Latimer Redfield
Charles Livingston Hyde	Edward Winthrop Reid
Herbert Armstrong Jaggard	Arleigh Dygert Richardson
Charles Henry Jeffras	John Frederic Roache
George Lyle Kingsley	William Alfred Robbins
Wiley Lyon Kingsley	Harry Leighton Rollins
Wallace Percy Knapp	Lucius Chester Ryce
David Denison Lambert	John Christopher Schwab
Elliot Cowdin Lambert	Samuel Washington Scott
Thomas Garner Lawrance	Frederic Norris Sewall
James Wright Lee, Jr.	Henry Dusenbury Shelden
Charlton Miner Lewis	Porter Sherman
William McElroy	Arthur Leffingwell Shipman
Charles Thompson Mathews	Edward Colhoun Smith
Charles Hale Matthews	Edward Lincoln Smith
Charles Albert Moore	Floyd Robinson Smith
Daniel Agnew Moore	George Clark Smith
Frank Gardner Moore	Thomas Calhoun Stearns
Edward Broadbent Morgan	Walter Gay Stebbins
Charles Rockwell Morley	Philip Battell Stewart
George Rudolf Mosle	Edgar Crane Stiles
John Andrew Myers	William Martin Strauss
Henry Townsend Nason	Frederick Cumings Truslow
William Ebenezer Nichols	Rollin Usher Tyler
Charles Fredrick Odell	Francis Joseph Vernon
John Henry Painter	Henry Stephens Washington
William Henry Parks	Thomas Glasby Waterman
Edward Wright Peet	John Whitmore
Frank George Peters	Frank Edward Wing
Arthur Stevens Phelps	Frederick James Winston
Edward Johnson Phelps	Evans Woollen
Sheffield Phelps	

MASTERS OF ARTS

Maurice Edwards Dunham, B.A. }
Yale University 1883 }

Lewis Fuller Reid, B.A. }
Yale University 1875 }

BACHELORS OF PHILOSOPHY

Gilbert Lincoln Husted Arnold	William Evelyn Hutchings
William Wallace Atterbury	Morison Thomas Hutchinson
Silas Warren Bartlett	Abraham Lincoln Hyde
Henry William Blake	William David Johnson
Joseph Augustus Blake, B.A. } Yale University 1885 }	Thomas Coggeshall Knowles
John Marvin Blakeley	Harrie Sheldon Leonard
Howard Cone Bolton	Cornelius Fay Lynde
Percival Ranney Bolton	Mahlon Henry Marlin
Louis Whitford Bond	Frederick Anderson Marsh
Thomas Stoddard Bronson	Conrad Henry Matthiessen
Harry Lockwood Burns	Edwin Frank Meyer
Lewis Emerson Cadwell	George Perkins Miller
Theodore Newton Case	Henry White Patten
John Chamberlain	George Eustis Potts
Frederick William Darlington	William Acker Rice
Alexander Harrison Davis	Arthur Jones Richmond
John Edwin Doane	Samuel Bostwick Robbins
Joseph Osterman Dyer	Reginald Ronalds
Harvey Farrington	Alexander Holley Rudd
Joseph Essex Fitzsimons	Henry Rustin
Robert Elder Forster	Emanuel Frank Selz
William Washington Gordon, 3d	William Sanders Tevis
James Eugene Greenebaum	John Metcalfe Thomas
Everett Mason Grimes	Calvert Townley
Harry Cloyd Hamill	George Pollok Devereux Townsend
David Neil Harper	Henry Lee Townsend
Frank Sperry Harrison	Thomas Brodhead Van Buren, Jr.
Willis Benjamin Herr	Henry Hayes Wadsworth
Jay Russell Hickox	Charles Willcox
William Barlow Hill	Rockwell Amasa Williams
Abraham Lincoln Howes	Willis Stoughton Williams

CIVIL ENGINEER

Henry Holbrook Gladding, PH.B. Yale University 1881

DYNAMIC ENGINEERS

Duane Judson Kelsey, PH.B. } Yale University 1884 }	William Wallace Nichols, PH.B. } Yale University 1884 }
--	--

DOCTORS OF PHILOSOPHY

John Miller Burnam, B.A. }	Arthur Pinkney Hall, B.A. }
Yale University 1884 }	Drury Coll. 1878, B.D. Yale 1884 }

BACHELORS OF DIVINITY

Henry Rolfe Baker, B.A. }	Frank Roland Kahler, B.A. }
Iowa College 1882, M.A. Iowa College }	Pennsylvania College 1881, }
Henry Mountfort Bowden }	M.A. Pennsylvania College }
Charles DeWolfe Brower, B.A. }	William Harrison McKinney, B.A. }
Oberlin College 1883 }	Roanoke College 1883 }
Herbert Stanley Brown, B.A. }	Samuel Melancthon MacNeill, B.A. }
Yale University 1883 }	Ripon College 1883 }
Mark Wilson Chunn, B.A. }	Solomon Greasley Merrick, B.A. }
Western Maryland College 1882 }	Lebanon Valley College 1883 }
Thomas Vaughan Davies }	Cornelius Howard Patton, B.A. }
Jacob Graver Dubbs, B.A. }	Amherst College 1883 }
Muhlenberg College 1883 }	George Hazard Perry, Jr., B.A. }
William Waters Dumm, B.A. }	Washburn College 1883 }
Western Maryland College 1883 }	John Pierpont, B.A. }
Henry Fairbank, B.A. }	Yale University 1883 }
Amherst College 1883 }	Norman Plass, B.A. }
Frederick Arthur Gaylord, B.A. }	Williams College 1882 }
Amherst College 1880, }	Frank Chamberlin Porter, B.A. }
M.A. Amherst College }	Beloit College 1883 }
Clarence DeVere Greeley, B.A. }	Edward Roberts }
Washburn College 1883 }	Peter Roberts }
Charles Edward Hitchcock, B.A. }	William Sandbrook }
Western Reserve University 1883 }	Robert Walter Sharp, B.A. }
Clinton Dorsey Hoover, B.A. }	Lafayette College 1880 }
Pennsylvania College 1883 }	Alonzo John Turkle, B.A. }
Idrys Jones }	Wittenberg College 1883 }
Joseph Morgan Jones }	Wilson Curtiss Wheeler, B.A. }
	Yale University 1880 }

DOCTORS OF MEDICINE

Charles Henry Brockett }	Robert Ogden DuBois, PH.B. }
Henry Osborn Carrington, PH.B. }	Yale University 1883 }
Yale University 1880 }	Francis Bartlett Kellogg, B.A. }
Louis Edward Cooper, PH.B. }	Yale University 1883 }
Yale University 1884 }	George Howard Pierce, B.A. }
	Bowdoin College 1882 }

BACHELORS OF LAWS

Louis Lawrence Barnum	Frank Dunlap Pavey, B.A. }
Charles Kingsbury Billings, B.A. }	Yale University 1884 }
Yale University 1882 }	Philip Neri Robinson
Clement Stevens Bissell	Henry Jacob Ryder, B.A. }
Lucius Boltwood, B.A. }	Yale University 1884 }
Yale University 1883 }	Henry Tweedy Shelton, Jr., B.A. }
Charles Francis Davies	Yale University 1884 }
Ralph James Gluckler	Sherman Day Thacher, B.A. }
Raymond Hoagland	Yale University 1883 }
Alice Rufie Jordan, B.S. }	Henry Raup Wagner, B.A. }
Michigan University 1885 }	Yale University 1884 }
John McKean, Jr.	Benjamin Streeter Warren
William Carl Mueller	Edward Livingston Wells
Frederick Adriance Osborn	James Clark Work, B.A. }
	Waynesburg College }

MASTERS OF LAWS

Demus Riley Gale, LL.B. }	Samuel Clinton Morehouse, LL.B. }
Columbian University }	Yale University 1885 }
Frank Anton Meyer, B.S. }	
Santa Clara College, }	
LL.B. Columbian University }	

HONORARY DEGREES:

MASTERS OF ARTS

Sidney Burr Beardsley, Judge of the Superior Court of Connecticut
 Rev. David Hillhouse Buel, B.A. Bristol College 1836
 John Guy Crump, Judge of County Court, New London County, Conn.
 Melville Egleston, B.A. Williams College 1870
 Dwight Holbrook, B.A. Hamilton College 1875
 Charles Hopkins
 Elbert Brinckerhoff Monroe, B.A. University of City of New York 1855
 Thomas Mather North, B.A. Williams College 1847
 Edward Payson Vining
 Edwin Saxton Wheeler

DOCTORS OF DIVINITY

- Rev. Timothy Dwight, B.A. 1849, President-elect of the University
 Rev. Franklin Woodbury Fisk, B.A. 1849, Professor in the Chicago
 Theological Seminary
 Rev. Lemuel Stoughton Potwin, B.A. 1854, Professor in Western
 Reserve University

DOCTORS OF LAWS:

- Hon. Joseph Roswell Hawley, B.A. Hamilton College 1847, U. S. Sen-
 ator from Connecticut
 Hon. Oliver Wendell Holmes, Jr., B.A. Harvard University 1861, Judge
 of the Supreme Court of Massachusetts
 Cyrus Northrop, B.A. 1857, President of the University of Minnesota
 Oliver Perry Shiras, LL.B. 1856, Judge of the U. S. District Court for
 the District of Iowa

APPOINTMENTS FOR COMMENCEMENT,

YALE COLLEGE, JUNE 30, 1886

ORATIONS

CHARLES WHEELER PIERSON, Valedictory Oration
 WASHINGTON IRVING HUNT, Salutatory Oration
 JUDSON SCHULTZE DUTCHER, Philosophical Oration
 FRANK GARDNER MOORE, Philosophical Oration
 WILLIAM ADAMS BROWN, Philosophical Oration
 CHARLTON MINER LEWIS, Philosophical Oration
 CALVIN DICKEY, Philosophical Oration

George Edwin Eliot, Jr.
 William Henry Parks
 Carl Darling Buck
 Charles Albert Moore
 { Arthur Nathaniel Alling
 { Herbert Armstrong Jaggard

Arthur Goebel
 { Chauncey William Goodrich
 { John Christopher Schwab
 Benjamin Joseph Davis

{ Norman Ilsley Adams
 { George Otis Fellows
 { Arthur Stevens Phelps
 { John Whitmore
 { Warren Austin Adams
 { John Joseph Corkery
 { Thomas Calhoun Stearns

John Beadle
 William Ebenezer Nichols
 Wilson Lee Cannon, Jr.
 { Abraham Lincoln Fellows
 { Edgar Crane Stiles
 { Michael Francis Connor
 { Frederick Wightman Moore

DISSERTATIONS

Wiley Lyon Kingsley	{ John King Griffith
Evans Woollen	{ Arthur Leffingwell Shipman
Charles Franklin Clarke	David Denison Lambert
{ Henry Semple Ames	{ Henry Townsend Nason
{ William White Capron	{ Frank George Peters
{ Percy Edgar	{ Henry Stephens Washington
Louis Bennett Bishop	Samuel Washington Scott

DISPUTES

William Williams Crehore	{ Daniel Doane Bidwell
{ George Lyle Kingsley	{ Wallace Percy Knapp
{ George Clark Smith	Thomas Glasby Waterman
William McElroy	{ Daniel Agnew Moore
{ Stanford Tappan Crapo	{ John Henry Painter
{ Walter Gay Stebbins	
<hr/>	
{ William Alfred Robbins	Frank Edward Wing
{ Frederick Norris Sewall	Gibbons Gray Cornwall
{ Edward Lincoln Smith	Edward Newton Brandegee
Frederick James Winston	{ Joseph Lincoln Adler
Everett Alanson Bates	{ Henry Ewing Hord
Thomas Mills Day, Jr.	

COLLOQUIES

Edward Broadbent Morgan	{ Paul Kimball Ames
Frederick Buell Hungerford	{ George Hathaway Bixby
Benjamin Harris Anthony	George Rudolf Mosle
	Rollin Usher Tyler
<hr/>	
William Morgan Gallup	Frederick Cumings Truslow
Francis Rexford Cooley	{ William Burton Goodwin
Bartlett Arkell	{ Edward Colhoun Smith
{ James Wright Lee, Jr.	
{ Floyd Robinson Smith	

SPECIAL HONORS

In Mental and Moral Science:
John Christopher Schwab

In Ancient Languages:
Warren Austin Adams
William Adams Brown
Carl Darling Buck
John Joseph Corkery
Washington Irving Hunt
Frank Gardner Moore
William Henry Parks
Edgar Crane Stiles

In Modern Languages:
Michael Francis Connor
Percy Edgar
Henry Townsend Nason
William Ebenezer Nichols

In English:
George Edwin Eliot, Jr.
Arthur Goebel
Chauncey William Goodrich

In History, Political Science, and Law:
Wilson Lee Cannon, Jr.
William White Capron
Frederick Wightman Moore
Charles Wheeler Pierson

In Mathematics:
William Williams Crehore
George Lyle Kingsley
Wiley Lyon Kingsley

In Natural and Physical Science:
Arthur Nathaniel Alling
Henry Stephens Washington

APPOINTMENTS FOR JUNIOR EXHIBITION,

YALE COLLEGE, APRIL 15, 1886

ORATIONS

JAMES ARCHBALD, JR.
 JOHN BENNETTO
 CARLETON LEWIS BROWNSON
 WILLIAM AARON CORNISH
 JOHN HUBBARD CURTIS
 THOMAS HAMLIN CURTIS
 JOHN NORTON POMEROY

Willoughby Babcock
 William Savage Burns
 John Caspar Diehl
 William Jessup Hand
 Frederic Wells Hart

Robert Irving Jenks
 Yan Phou Lee
 George Daniel Pettee
 William Albert Setchell
 Frederic Roger Whittlesey

Gerald Hamilton Beard
 Edward Lydston Bliss
 Ira Clifton Copley
 Harry Burr Ferris
 Samuel Knight

Charles Henry Ludington, Jr.
 Clarence Tomlinson Morse
 Hebert Farrington Perkins
 William Lyon Phelps
 Maximilian Lincoln Stein

DISSERTATIONS

Frederick Starkweather Chase
 Henry Alexander Dann
 Charles Bulkeley Jennings
 Allen Wardner Johnson
 John Henry Kirkham
 Frank Dodge Leffingwell
 Robert Hart Lewis

Arthur Reed Pennell
 Benjamin Romaine
 Isaac Grant Rosenzweig
 Paul Spencer
 William Larned Thacher
 Howard Crosby Tracy

DISPUTES

Arthur Wolfe Brady
 Willard Robinson Douglass
 John Minor Gillespie
 Robert Beers Gray
 Clinton Larue Hare
 DeWitt Clinton Huntington
 Thomas Norwood Penrose

Frederic Smith Pickett
 Thomas Wyman Porter
 Frank Clifton Smith
 Richard Simms Thomas
 William Xenophon Weed
 Frederick Searle Woodward

Elmer Fox Berkele
 Edward Lathrop Burke
 Sanford Ellsworth Cobb
 Alfred Coit
 Robert Nelson Corwin
 Clarence Clark Ferris
 George Edwin Hill
 Frank Clifford Howe
 John Howard Hume

Obed Wilson Irvin
 John Scott King
 John Leverett
 Edward Hiram Norton, Jr.
 Thomas Penney
 John Rogers, Jr.
 Lewis Seymour
 Thomas Hunt Talmage

COLLOQUIES

William Maitland Abell
Dwight Eliot Bowers
Joseph Thomas Cunningham
Bernard Francis Gaffney
Andrew Frink Gates
Madison Grant

Robert Maxwell
Joseph Weed Middlebrook
Thomas Frederick Sanford
Walter Bradley Sheppard
Edward Staehlin

Leslie Dayton Bissell
Allan Blair Bonar
Robert Forbes Hawkes
Henry Belden Ketcham
Charles Asher Knight
Alfred Leeds
William McCormick

Frank Adams Meacham
Homer Tomlinson Partree
Arthur Perkins
Albert Richard Pritchard
Francis Bacon Trowbridge
James Johnston Waring, Jr.

UNDERGRADUATE SCHOLARS OF THE HOUSE, YALE
COLLEGE, FOR THE YEAR 1886-87:

WOOLSEY Scholar, Class of 1887—JOHN NORTON POMEROY.

WOOLSEY Scholar, Class of 1888—THEODORE LOCKWOOD LEVERETT.

WOOLSEY Scholar, Class of 1889—HORACE FLETCHER WALKER.

HURLBUT Scholar, Class of 1889—LESTER BRADNER, JR.

THIRD Freshman Scholar, Class of 1889—WILLIAM ADOLPHE McQUAID.

UNIVERSITY PRIZE, AWARDED IN JUNE, 1886:

JOHN A. PORTER Prize—Sherman D. Thacher, B.A., of the Senior Class in the Law School.

PREMIUMS AWARDED IN YALE COLLEGE DURING THE
YEAR 1885-86:

DEFOREST Medal, Class of 1886—Evans Woollen.

TOWNSEND Premiums, Class of 1886—William A. Brown, Arthur Goebel, Frank G. Peters, Edward J. Phelps, Philip B. Stewart.

SENIOR MATHEMATICAL Prizes, Class of 1886—2d Prize, George L. Kingsley.

COBDEN CLUB Medal, Class of 1886—Calvin Dickey.

SCOTT Prize in German, Class of 1886—Charlton M. Lewis.

SCOTT Prize in French, Class of 1887—Sydney Stein.

WINTHROP Prizes, Class of 1887—1st Prize, Thomas H. Curtis; 2d Prize, John N. Pomeroy.

JUNIOR EXHIBITION Prizes, Class of 1887—1st Prize, John Bennetto; 2d Prizes, Gerald H. Beard, William A. Cornish, John H. Curtis, Allen W. Johnson, Yan Phou Lee, Herbert F. Perkins, William L. Phelps.

PREMIUMS for English Composition, Class of 1888: 1st Prizes, Edward S. Farrington, Eugene W. Harter, Orland S. Isbell, Henry L. Stimson; 2d Prizes, Moses J. Husinsky, Frank I. Paradise, Harrison G. Platt, Frank L. Woodward; 3d Prizes, Leonard W. Bacon, Jr., Laurance J. Carmalt, Richard M. Hurd, Thomas E. Ripley, Elbert R. Tillinghast.

PREMIUMS for Declamation, Class of 1888: 1st Prizes, William A. Parshall, Leo Stein; 2d Prizes, Alfred Raymond, Fred P. Solley.

MATHEMATICAL Premiums: Class of 1888—1st Prize, Irving Fisher; 2d Prize, Edward F. Ayres; 3d Prize, Frederic W. Mar.

Class of 1889—1st Prize, Edward B. Hinckley; 2d Prize, Thomas E. Donnelley.

BERKELEY PREMIUMS for Latin Composition, Class of 1889: 1st Grade, Lester Bradner, Jr., Elmer F. Letcher, Edmund D. Scott, Horace F. Walker; 2d Grade, John W. Banks, Dwight W. Bissell, George Coghill, Edward B. Hinckley, William A. McQuaid, Augustus H. Mosle, Samuel N. Pond.

PREMIUMS AWARDED IN THE SHEFFIELD SCIENTIFIC
SCHOOL DURING THE YEAR 1885-86:

Class of 1886:

FOR EXCELLENCE IN CIVIL ENGINEERING—Henry H. Wadsworth.

FOR EXCELLENCE IN DYNAMIC ENGINEERING—William D. Johnson.

FOR EXCELLENCE IN GERMAN—Henry W. Blake.

Class of 1887:

FOR EXCELLENCE IN THE MATHEMATICS OF JUNIOR YEAR—Robert F. Gibson, with honorable mention of Robert C. Augur and Edgar B. Harger.

Class of 1888:

FOR EXCELLENCE IN ALL THE STUDIES OF THE FRESHMAN YEAR—Percy F. Smith, with honorable mention of Edwin H. Lockwood and Frank H. Farquhar.

FOR EXCELLENCE IN CHEMISTRY—Percy F. Smith, with honorable mention of Edwin H. Lockwood, Frank H. Farquhar, and William C. Catlin.

FOR EXCELLENCE IN PHYSICS—Percy F. Smith, with honorable mention of Arthur C. Alexander, Frank H. Farquhar, Edwin H. Lockwood and Frank N. Waterman.

FOR EXCELLENCE IN GERMAN—Percy F. Smith, with honorable mention of Frank H. Farquhar and Addison Graves.

- FOR EXCELLENCE IN MECHANICAL DRAWING—Edwin R. Hodge, Edwin W. Robinson, Percy F. Smith, and Frank N. Waterman.
- FOR EXCELLENCE IN MATHEMATICS—Percy F. Smith, with honorable mention of Edwin H. Lockwood and Morgan Walcott.
- FOR EXCELLENCE IN ENGLISH COMPOSITION—1st Prizes, Edwin R. Hodge, Percy F. Smith; 2d Prizes, George S. Howland, Samuel H. McCrea; 3d Prizes, Arthur C. Alexander, George D. Colton, Frank H. Farquhar, Addison Graves, Felix Kleeberg, Edwin H. Lockwood.

PRIZES AWARDED IN THE YALE LAW SCHOOL, 1886.

- TOWNSEND PRIZE (\$100), for pronouncing the best oration at graduation—Sherman Day Thacher, B.A., New Haven.
- Committee of Award: President Cyrus Northrop, Minneapolis, Minn.
Hon. Oliver Wendell Holmes, Jr., Boston, Mass.
Gen. Brayton Ives, New York City.
- JEWELL PRIZE (\$50), for the best examination at graduation—Henry Tweedy Shelton, Jr., B.A., Bridgeport.
- O. S. SEYMOUR PRIZE (\$60), to that member of the graduating class who has made the greatest improvement in scholarship during both years of his course—John McKean, Jr., Providence, R. I.
- BETTS PRIZE (\$50), to the member of the Junior Class receiving the highest marks at his annual examination—Leonard Mayhew Daggett, B.A., New Haven.

HONORS:

SENIOR CLASS

Degree of LL.B., *magna cum laude*.

Henry Tweedy Shelton, Jr., B.A.

Degree of LL.B., *cum laude*.

Louis Lawrence Barnum, Lucius Boltwood, B.A., Sherman Day Thacher, B.A.

JUNIOR CLASS

Honorable mention for excellence at the annual examination:

Leonard Mayhew Daggett, B.A., John Harrison, B.A., Overton Lafayette Hughes, B.A., James Benjamin Keogh, B.A., Otis Strong, B.A.

INDEX

	Page		Page
Abbreviations	4	Civil Engineer's Degree. <i>See</i> Engineer.	
Absence from College, leave of....	30	College, Beneficiary aid in.....	60-62
bills during	57-58	Board, price of, in.....	58, 60
Academical Dep't. <i>See</i> College.		Course of instruction in	31-55
Admission, terms of, to Art School.	112	Degrees in	66, 96-97
to College	27-30	list of, 1886.....	200-1
to Divinity School.....	114	Elective studies in.....	31-32, 35-46
to Grad. Courses.....	95, 97	Expenses in	57-59
to Law School.....	147-48	table of estimated.....	60
to Medical School.....	127-28	Faculty of.....	25
to Sheffield Sci. School.	69-72	Government of students in...	30
Advanced Standing, Admission to,		Graduate Fellowships in.....	62-64
in College.....	29	list of holders of.	14
in Sheffield Sci. School.	72	Historical notice of.....	15, 17, 26
Aid to students in College.....	60-62	Honors at graduation in.....	55
in Sheffield Sci. School.	91-92	awards of, 1886.....	206
Appointments, Commencem't, 1886	205-6	Prescribed studies in.....	31-34
Junior Exhibition, 1886	207-8	Prizes offered in.....	65-66
Art School, Collections of	113	awards of, 1885-86.....	208-9
Council of.....	108	Rooms in.....	58-59
Course of Instruction in.....	108-12	prices of	59-60
Faculty of.....	108	Scholarships offered in.....	63-64
Fees in.....	112	holders of, 1886.....	208
Library of.....	113	Students in	164-77
Students in	186-87	Terms and vacations in	6, 55-56
Term and vacation in..	112	Terms of admision to	27-30
Terms of admission to.	112	Text-books in	35-46
Arts, Bachelor of, Degree of.....	66	cost of.....	60
course for	32-46	loan libraries of.....	37, 40, 62
list of class of 1886	200	Tuition charges in	57
Master of, Degree of.....	96-97	Commencement Day	6, 55
course for	99-107	Appointments for, 1886	205-6
list of graduates of 1886	201	Corporation, Charter powers of....	15-23
Astronomical Observatory	159-60	Legal name of.....	19
Bachelor's Degree. <i>See</i> Arts, Divinity, Law, Philosophy.		Members and officers of....	5
Beneficiary aid. <i>See</i> Aid.		Course of Instruction. <i>See</i> Instruction.	
Bills. <i>See</i> Expenses.		Degree of Bachelor of Arts.....	66
Board, cost of	58, 60	course for	32-46
Bonds of College students.....	30	Bachelor of Divinity.....	120
of Medical students	135	course for	115-20
Calendar for 1886-87.....	6	Bachelor of Philosophy.....	91-92
Certificates. <i>See</i> Testimonials.		courses for.....	72-78
Charters of the University	15-21		

	Page		Page
Degree of Bachelor of Laws.....	150-51	Faculty, Graduate Courses.....	93-94
course for.....	138, 140, 148-49	Law School.....	137
Civil Engineer.....	97	Medical School.....	125
course for.....	74, 83-86, 107	University.....	7-12
Doctor of Civil Law.....	150-51	Fees. <i>See</i> Expenses.	
course for.....	138, 141, 148-49	Fellowships, Graduate, in College.....	62-63
Doctor of Medicine.....	134	in Divinity School.....	123-24
course for.....	128-29	List of holders of.....	14
Doctor of Philosophy.....	96	Fine Arts, School of. <i>See</i> Art	
courses for.....	95, 97-107	School.....	
Dynamic (or Mechanical) En-		Government of the University.....	15-23
gineer.....	97	Graduate Fellowships and Scholar-	
course for.....	74-75, 86-88, 106	ships. <i>See</i> Fellowships, Scholar-	
Master of Arts.....	96-97	ships.	
courses for.....	96-107	Graduate Instruction, Courses of..	97-107
Master of Laws.....	150-51	Faculty of.....	93-94
course for.....	138, 140, 148-49	Fees in.....	95
Degrees conferred in 1886, List of..	199-205	Historical notice of.....	95
Departments of Instruction, List of	24	Students in.....	161-63
Divinity School, Courses of Instruc-		Terms and Vacations in.....	6, 95
tion in.....	115-20	Terms of admission to.....	95, 97
Degree in.....	120	Gymnasium.....	57
Degrees given in 1886 in.....	203	Honorary degrees, List of, 1886....	204-5
Expenses in.....	122-23	Honors at graduation, in College..	55
Faculty of.....	114	List of, 1886.....	206
Graduate Fellowships in.....	123-24	in Law School.....	151
list of holders of.....	14	List of, 1886.....	210
Library of.....	121, 153	Instruction, Courses of, in Art School	108-12
Students in.....	188-93	College.....	31-55
Term and vacation in.....	124	Divinity School.....	115-20
Terms of admission to.....	114	Graduate Courses.....	97-107
Doctor's degree. <i>See</i> Law, Medi-		Law School.....	138, 140-46
cine, Philosophy.		Medical School.....	126-33, 135-36
Dwight Hall.....	56	Sheffield Sci. School.....	68-69, 72-90
Dynamic Engineer's degree. <i>See</i>		Instructors, List of.....	12-13
Engineer.		Junior Exhibition.....	65
Elective studies in College.....	31-32, 35-46	Appointments at, 1886.....	207-8
Engineer, Civil, Degree of.....	97	Law School, Course of instruction	
course for.....	74, 83-86, 107	in.....	138, 140-44
Dynamic (Mechanical), Degree of	97	for special students.....	145-46
Course for.....	74-75, 86-88, 106	Degrees in.....	150-51
List of graduates of 1886.....	202	List of, 1886.....	204
Examinations at Admission. <i>See</i>		Expenses in.....	151
Admission.		Faculty of.....	137
Expenses, Art School.....	112	Library of.....	139, 149, 153
College.....	57-60	Prizes in.....	149-50
Divinity School.....	122-23	awards of, 1886.....	210
Graduate Courses.....	95-96	Students in.....	196-98
Law School.....	151	Terms and Vacations in.....	6, 146
Medical School.....	135	Terms of admission to.....	147-48
Sheffield Sci. School.....	91	Library, Art School.....	113
Faculty, Art School.....	108	Divinity School.....	121, 153
College.....	25-26	Law School.....	139, 149, 153
Divinity School.....	114	Lincoln and Brothers.....	152-53

	Page		Page
Library, Lowell Mason.....	121, 153	Religious services, College.....	56
Medical School.....	134	Divinity School.....	120
Sheffield Sci. School.....	153	Required studies in College.....	31-34
University.....	56, 121, 152	Rooms in College.....	58-59
Loan Fund in College.....	60	Prices of.....	59-60
Master's degree. <i>See</i> Arts, Law.		Scholarships, graduate.....	63-64
Mechanical Engineer's degree. <i>See</i>		Holders of.....	14
Engineer.		Undergraduate.....	63-64
Medical School, Course of instruction in.....	126-33, 135-36	Holders of.....	208
Degree in.....	134	<i>See, also</i> , Aid.	
list of class of 1886.....	203	Secretary, Office hours of.....	4
Expenses in.....	135	Sheffield Scientific School, Board of	
Faculty of.....	125	State Visitors of.....	68, 92
Historical notice of.....	125-26	Courses of instruction in.....	68-69
Library of.....	134	graduate.....	68-69, 97-107
Prizes in.....	134	special.....	69
Students in.....	194-95	undergraduate.....	72-90
Terms and vacations in.....	6, 128	Degrees in.....	92, 96-97
Terms of admission to.....	127-28	list of, 1886.....	202
Museum of Natural Hist., Peabody	154-58	Expenses in.....	91
Observatory.....	159-60	Governing Board of.....	67-68
Optional studies. <i>See</i> Elective.		Historical notice of.....	68
Peabody Museum of Natural Hist.	154-58	Library of.....	153
Pecuniary aid in College.....	60-62	Prizes awarded in.....	209-10
in Sheffield Sci. School.....	91-92	State Scholarships in.....	91-92
Philosophy, Bachelor of, Degree of	91-92	Students in.....	178-85
courses for.....	72-78	Terms and vacations in.....	6, 91
list of class of 1886.....	202	Terms of admission to.....	69-72
Doctor of, Degree of.....	96	Students, Lists of.....	161-98
courses for.....	95, 97-107	Summary of.....	199
list of graduates, 1886.....	203	Studies. <i>See</i> Instruction.	
Philosophy and the Arts, Department of.....	24	Summary of Students.....	199
Political and Social Science, graduate Courses in.....	98-99	Term-bills. <i>See</i> Expenses.	
Porter, John A., University Prize .	160	Terms and Vacations.....	6
Award of, 1886.....	208	Testimonials on admission to College	29
Prayers, College.....	56	Sheffield Sci. School.....	69
Preliminary Examinations, College	28	Text-books used in College.....	35-46
Sheffield Sci. School.....	70	cost of.....	60
Premiums. <i>See</i> Prizes.		Loan Libraries of.....	37, 40, 62
Prescribed studies in College.....	31-34	in Sheffield Sci. School.....	72-78
President, Office hours of.....	4	Loan Library of.....	90
Prizes, College.....	65-66	Theological Department. <i>See</i>	
awards of, 1885-86.....	208-9	Divinity School.	
Law School.....	149-50	Treasurer, Bills payable to.....	57
awards of, 1885-86.....	210	Office hours of.....	4
Medical School.....	134	Tuition, charge for, in Art School..	112
Sheffield Sci. School, awards of,		College.....	57
1885-86.....	209-10	Graduate Courses.....	95
University.....	160	Law School.....	151
award of, 1886.....	208	Medical School.....	135
Reading Room.....	56, 153	Sheffield Sci. School.....	91
		University, Charters of the.....	15-21
		Departments of the.....	24
		Vacations.....	6





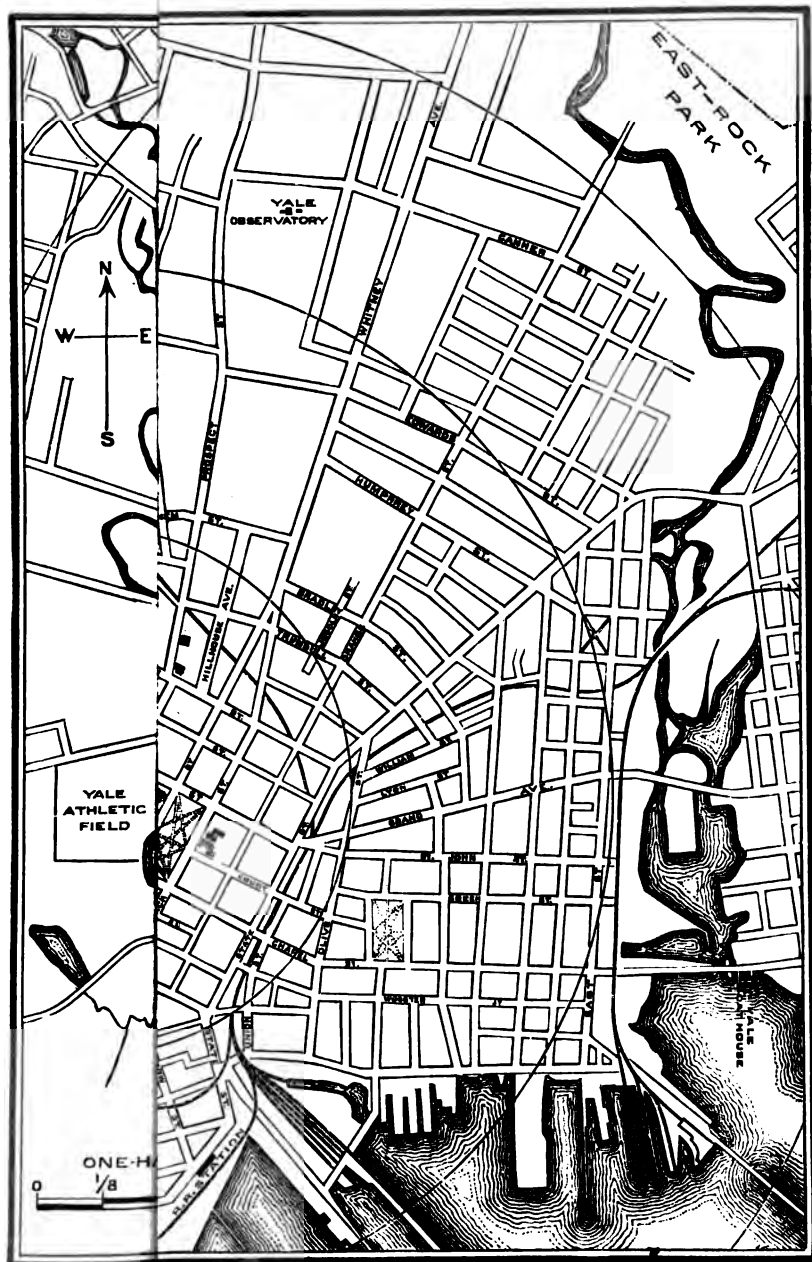


CATALOGUE
OF
YALE UNIVERSITY

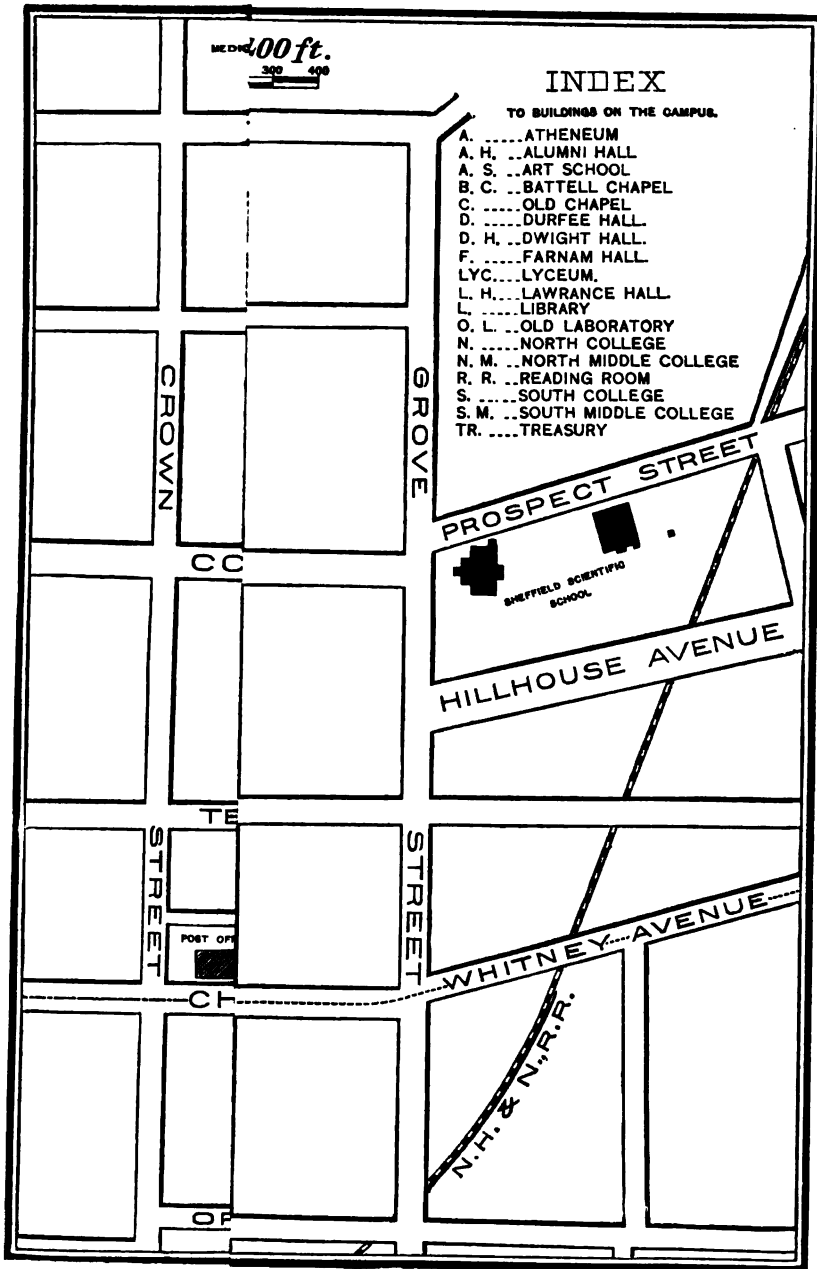


1887-88

VEN.



NGS.



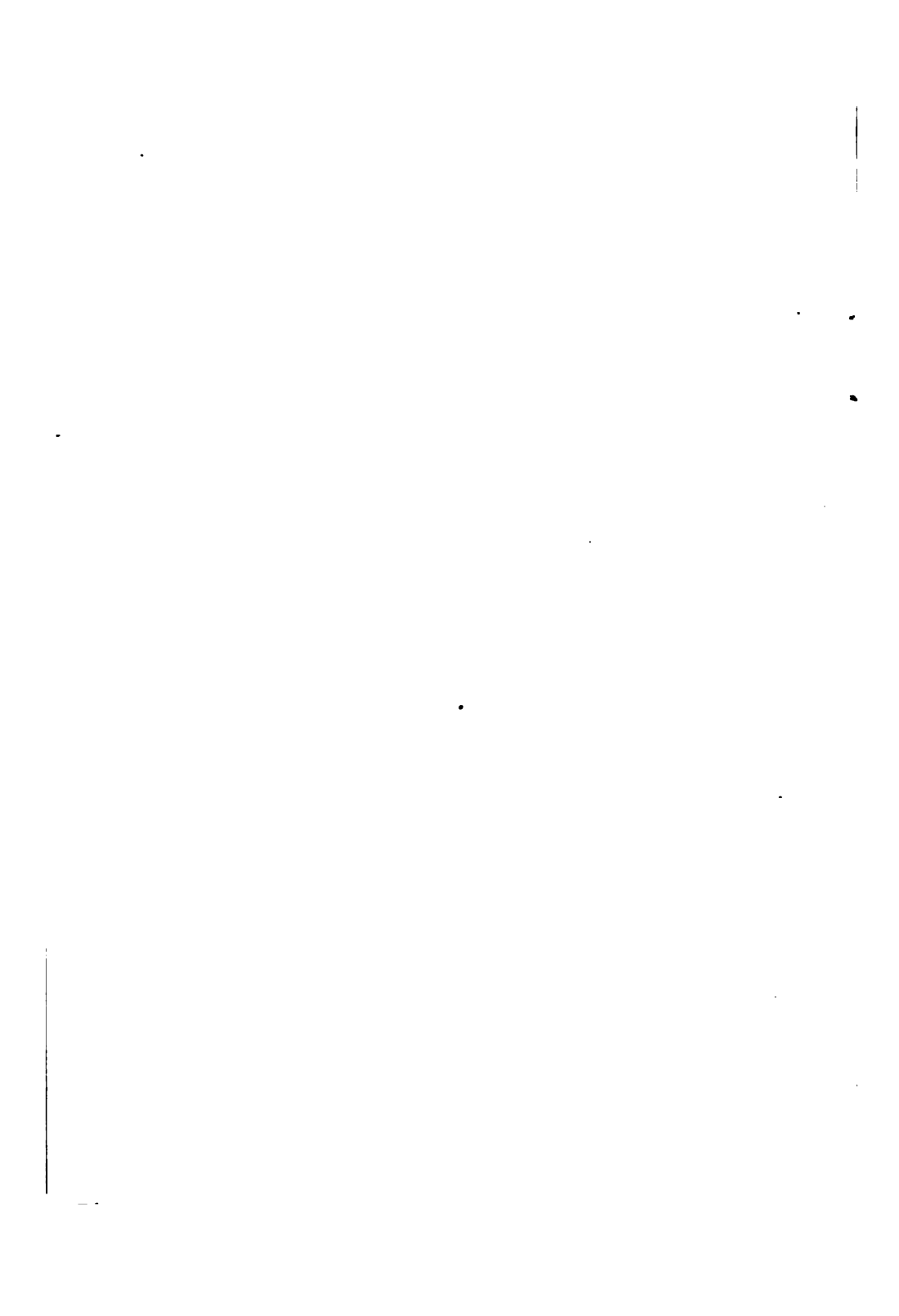
CATALOGUE
OF
YALE UNIVERSITY

CLXXXVIIIth YEAR

1887-88



NEW HAVEN:
TUTTLE, MOREHOUSE & TAYLOR, PRINTERS
1887



CONTENTS

ABBREVIATIONS, OFFICE HOURS, ETC.	4
MEMBERS AND OFFICERS OF THE CORPORATION	5
CALENDAR FOR 1887-88	6
LIST OF FACULTY, INSTRUCTORS, ETC.	7-14
GOVERNMENT OF THE UNIVERSITY	15-23
LIST OF DEPARTMENTS OF INSTRUCTION	24
ACADEMICAL DEPARTMENT (YALE COLLEGE)	25-66
SHEFFIELD SCIENTIFIC SCHOOL	67-92
COURSES OF GRADUATE INSTRUCTION	93-108
SCHOOL OF THE FINE ARTS	109-114
YALE DIVINITY SCHOOL	115-125
YALE MEDICAL SCHOOL	126-138
YALE LAW SCHOOL	139-153
LIBRARIES	154-155
PEABODY MUSEUM OF NATURAL HISTORY	156-160
OBSERVATORY	161-162
UNIVERSITY PRIZES	163
LISTS OF STUDENTS	164-205
Graduate Courses	164-167
Yale College	168-182
Sheffield Scientific School	183-190
Art School	191-192
Divinity School	193-198
Medical School	199-200
Law School	201-204
Summary	205
LISTS OF DEGREES, APPOINTMENTS, AND PRIZES	206-207
DIRECTORY OF OFFICERS	218-220
INDEX	221-224
MAPS OF NEW HAVEN AND OF THE UNIVERSITY	Facing title-page

ABBREVIATIONS

A., Absent on leave; c., Old Chapel; d., Durfee Hall; e., East Divinity Hall; f., Farnam Hall; l., Lawrance Hall; lyc., Lyceum; n., North College; n. m., North Middle College; n. s. h., North Sheffield Hall; p., Peabody Museum; s., South College; s. h., Sheffield Hall; s. m., South Middle College; tr., Treasury Building; w., West Divinity Hall.

Upon the College Square, the rooms numbered from 1 to 32 are in South College; from 33 to 64 in South Middle College; from 65 to 96 in North Middle College; from 97 to 128 in North College; from 129 to 177 in Farnam Hall; from 178 to 185 in the Lyceum; from 186 to 200 in the Old Chapel; from 201 to 240 in Durfee Hall; from 241 to 282 in Lawrance Hall.

The rooms in East Divinity Hall are numbered from 1 to 54; in West Divinity Hall from 55 to 124.

The rooms in Sheffield Hall are numbered from 1 to 21; in North Sheffield Hall from 26 to 58.

OFFICE HOURS

THE PRESIDENT is in his room, No. 7 Treasury Building, from 10.30 A. M. to 12 M., every week-day during term-time.

THE TREASURER'S OFFICE, No. 5 Treasury Building, is open from 9 A. M. to 3 P. M., every week-day during term-time, and from 10 A. M. to 1 P. M., during vacations.

THE SECRETARY is to be found in the Library, every week-day during term-time, from 9.30 A. M. to 1 P. M.

For Catalogues and general information, address THE SECRETARY OF YALE UNIVERSITY, NEW HAVEN, CONNECTICUT.

The Catalogue is published in December of each year, and is sold at twenty-five cents a copy,—or thirty cents if postage is included.

A list of the Graduates of the University (in Latin) is published triennially,—the last edition in 1886; a copy will be supplied to any graduate desiring it, on receipt of the postage (eight cents); copies may be obtained by other persons at cost price, fifty cents, with postage.

CORPORATION

PRESIDENT

REV. TIMOTHY DWIGHT, D.D., LL.D.

FELLOWS

HIS EXCELLENCY PHINEAS C. LOUNSBURY, LL.D., RIDGEFIELD
HIS HONOR JAMES L. HOWARD, HARTFORD
REV. GEORGE J. TILLOTSON, M.A., WETHERSFIELD
HON. WILLIAM M. EVARTS, LL.D., NEW YORK CITY
CHIEF JUSTICE MORRISON R. WAITE, LL.D., WASHINGTON, D. C.
REV. LAVALETTE PERRIN, D.D., TORRINGTON
REV. BURDETT HART, D.D., NEW HAVEN
REV. JOSEPH W. BACKUS, M.A., PLAINVILLE
HON. FREDERICK J. KINGSBURY, M.A., WATERBURY
REV. THEODORE T. MUNGER, D.D., NEW HAVEN
REV. JOSEPH ANDERSON, D.D., WATERBURY
REV. GEORGE LEON WALKER, D.D., HARTFORD
REV. CHARLES RAY PALMER, M.A., BRIDGEPORT
REV. JOSEPH H. TWICHELL, M.A., HARTFORD
HON. WILLIAM WALTER PHELPS, M.A., ENGLEWOOD, N. J.
REV. JAMES W. COOPER, D.D., NEW BRITAIN
WILLIAM W. FARNAM, M.A., NEW HAVEN
THOMAS G. BENNETT, Ph.B., NEW HAVEN

SECRETARY

FRANKLIN B. DEXTER, M.A.

TREASURER

AUDITOR

WILBUR F. DAY

CALENDAR

1887

22 Sept.	Thursday	FIRST COLLEGE TERM begins.
29 Sept.	Thursday	Fall Term, Law School, begins.
1 Oct.	Saturday	School of the Fine Arts, term begins.
6 Oct.	Thursday	First Term, Medical School, begins.
22 Dec.	Thursday	FIRST TERM ends.

Winter Vacation of two weeks.

1888

5 Jan.	Thursday	SECOND COLLEGE TERM begins.
12 Jan.	Thursday	Second Term, Medical School, begins.
12 Jan.	Thursday	Winter Term, Law School, ends.
22 March	Thursday	Junior Exhibition.
28 March	Wednesday	SPRING RECESS begins.
4 April	Wednesday	SPRING RECESS ends.
12 April	Thursday	Spring Term, Law School, begins.
7 May	Monday	Berkeley Scholarship Examination.
14, 15 May	Mon., Tuesd.	Annual Examination, Divinity School.
16 May	Wednesday	Anniversary, Divinity School.
21 May	Monday	Woolsey Scholarship Examination begins.
21 May	Monday	Winthrop Prize Examination.
1 June	Friday	School of the Fine Arts, term ends.
22 June	Friday	DeForest Prize Speaking.
24 June	Sunday	Baccalaureate Sermon.
25 June	Monday	Presentation for Degrees.
26 June	Tuesday	Anniversary of the Society of Alumni.
26 June	Tuesday	Anniversary of the Sheffield Scientific School.
26 June	Tuesday	Anniversary of the Law School.
27 June	Wednesday	COMMENCEMENT.
28 June	Thursday	} Examinations for admission.
29 June	Friday	
30 June	Saturday	

Summer Vacation of twelve weeks.

18, 19 Sept.	Tuesd., Wedn.	Examinations for admission.
20 Sept.	Thursday	FIRST COLLEGE TERM begins.
29 Sept.	Thursday	Fall Term, Law School, begins.
1 Oct.	Monday	School of the Fine Arts, term begins.
4 Oct.	Thursday	First Term, Medical School, begins.
20 Dec.	Thursday	FIRST TERM ends.

FACULTY AND INSTRUCTORS

- Rev. TIMOTHY DWIGHT, D.D., LL.D.**
 PRESIDENT (7 TR.) 126 College st.
- Rev. NOAH PORTER, D.D., LL.D.**
Clark Professor of Moral Philosophy and
Metaphysics (275 L.) 31 Hillhouse av.
- ELIAS LOOMIS, LL.D.**
Munson Professor of Natural Philosophy and
Astronomy 141 Church st.
- JAMES D. DANA, PH.D., LL.D.**
Silliman Professor of Geology and Mineralogy (6 P.) 24 Hillhouse av.
- Rev. GEORGE E. DAY, D.D.**
Holmes Professor of the Hebrew Language and Literature
and Biblical Theology (5 E.) 125 College st.
- Rev. SAMUEL HARRIS, D.D., LL.D.**
Dwight Professor of Systematic Theology (1 E.) 144 College st.
- Rev. CHESTER S. LYMAN, M.A.**
Sheffield Professor of Astronomy 88 Trumbull st.
- Rev. JAMES M. HOPPIN, D.D.**
Professor of the History of Art (3 Art School) 47 Hillhouse av.
- Hon. EDWARD J. PHELPS, LL.D.**
Kent Professor of Law
- WILLIAM D. WHITNEY, PH.D., LL.D.**
Professor of Sanskrit and Comparative Philology, and
Instructor in Modern Languages (205 D.) 227 Church st.
- MOSES C. WHITE, M.D.**
Professor of Pathology 48 College st.
- Hon. FRANCIS WAYLAND, LL.D.**
Professor of the Law of Evidence, and
Dean of the Law School (17 Court House) 91 Whitney av.
- Rev. GEORGE P. FISHER, D.D., LL.D.**
Titus Street Professor of Ecclesiastical
History (9 E.) 27 Hillhouse av.
- CHARLES A. LINDSLEY, M.D.**
Professor of the Theory and Practice of Medicine 15 Elm st.
- HURERT A. NEWTON, LL.D.**
Professor of Mathematics 135 Elm st.

Charles F. Johnson, LL.D.

Professor of Zoology, and Director of the

Yale Zoological School

(3 S. H.) 14 Trumbull st.

John W. Johnson, M.A.

Professor of Inorganic and Agricultural Chemistry

54 Trumbull st.

John W. Johnson, M.D.

Professor of Zoology

(4 S. H.) 246 Orange st.

John W. Johnson, M.D.

Professor

216 Crown st.

John W. Johnson, LL.D.

Professor of Natural Law and the

History of the

257 Church st.; 137 Edwards st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

John W. Johnson, LL.D.

Professor of

257 Church st.

OTHNIEL C. MARSH, PH.D., LL.D.

*Professor of Palaeontology, and Curator of the
Geological Collection* (8 P.) 360 Prospect st.

EUGENE L. RICHARDS, M.A.

Assistant Professor of Mathematics (86 N. M.) 315 York st.

WILLIAM I. KNAPP, PH.D.

Street Professor of Modern Languages 75 Whitney av.

JOHN H. NIEMEYER, M.A.

Street Professor of Drawing 8 Art School

FRANKLIN B. DEXTER, M.A.

*Larned Professor of American History, and
Assistant Librarian* (Library) 178 Prospect st.

SIMEON E. BALDWIN, M.A.

*Professor of Constitutional and Mercantile Law,
Corporations, and Wills* (25 White's B'd'g.) 44 Wall st.

Professor of Analytical Chemistry and Metallurgy

TRACY PECK, M.A.

Professor of the Latin Language and Literature 124 High st.

WILLIAM H. CARMALT, M.D.

Professor of the Principles and Practice of Surgery 87 Elm st.

ADDISON E. VERRILL, M.A.

*Professor of Zoology, and Curator of the Zoological
Collection* (15 P.) 86 Whalley av.

Rev. CORNELIUS L. KITCHEL, M.A.

Instructor in Greek 331 Temple st.

WILLIAM G. SUMNER, LL.D.

*Pelotiah Perit Professor of Political and
Social Science* (118 N.) 140 Edwards st.

Rev. GEORGE T. LADD, D.D.

Professor of Mental and Moral Philosophy (276 L.) 324 York st

JOHNSON T. PLATT, M.A.

*Professor of General Jurisprudence, Torts,
and Equity* (95 Orange st.) 256 Bradley st.

SIDNEY I. SMITH, M.A.

Professor of Comparative Anatomy (14 P.) 147 Whalley av.

WILLIAM G. MIXTER, M.A.

Professor of Chemistry (8 S. H.) 144 Edwards st.

HENRY P. WRIGHT, PH.D.

*Dunham Professor of the Latin Language
and Literature* (89 N. M.) 128 York st.

- JAMES K. THACHER, M.D.
Professor of Physiology and Clinical Medicine 206 Crown st.
- HENRY A. BEERS, M.A.
Professor of English Literature (171 F.) 25 Vernon st.
- A. JAY DUBOIS, PH.D.
Professor of Civil Engineering (34 N. S. H.) 258 Bradley st.
- EDWARD S. DANA, PH.D.
Assistant Professor of Natural Philosophy, and
Curator of the Mineralogical Collection (4 P.) 111 Grove st.
- THOMAS D. SEYMOUR, M.A.
Hillhouse Professor of the Greek Language
and Literature (121 N.) 112 College st.
- CHARLES S. HASTINGS, PH.D.
Professor of Physics (39 N. S. H.) 191 Bradley st.
- WILLIAM R. HARPER, PH.D.
Professor of the Semitic Languages (117 N.) 135 College st.
- FRANK E. BECKWITH, M.D.
Professor of Clinical Gynaecology 139 Church st.
- WILLIAM K. TOWNSEND, D.C.L.
Edward J. Phelps Professor of Contracts
and Admiralty Jurisprudence (153 Church st.) 148 Grove st.
- JAMES CAMPBELL, M.D.
Professor of Obstetrics and the Diseases of Women
and Children Hartford
- THEODORE S. WOOLSEY, M.A., LL.B.
Professor of International Law 250 Church st.
- THOMAS H. RUSSELL, M.D.
Professor of Materia Medica and Therapeutics 137 Elm st.
- REV. JOHN E. RUSSELL, M.A., B.D.
Winkley Professor of Biblical Theology (7 E.) 119 Grove st.
- FRANK A. GOOCH, PH.D.
Professor of Chemistry 180 Whitney av.
- SAMUEL W. WILLISTON, M.D., PH.D.
Assistant Professor and Demonstrator of Anatomy 113 York st.
- WILLIAM L. CUSHING, M.A.
Instructor in Latin 87 N. M.
- WILLIAM BEEBE, B.A.
Assistant Professor of Mathematics and Astronomy 83 Wall st.
- ANDREW W. PHILLIPS, PH.D.
Assistant Professor of Mathematics (118 N.) 184 York st.

HENRY W. FARNAM, M.A., R.P.D.		
<i>Professor of Political Economy</i>		43 Hillhouse av.
GEORGE BENDELARI, B.A.		
<i>Assistant Professor of Modern Languages</i>		5 S.
RUSSELL H. CHITTENDEN, PH.D.		
<i>Professor of Physiological Chemistry</i>	(7 S. H.)	83 Trumbull st.
ARTHUR T. HADLEY, M.A.		
<i>Professor of Political Science</i>		51 Whitney av.
REV. GEORGE B. STEVENS, PH.D., D.D.		
<i>Buckingham Professor of New Testament Criticism and Interpretation</i>	(11 E.)	1298 Chapel st.
ALFRED L. RIPLEY, B.A.		
<i>Assistant Professor of German</i>		240 D.
WILLIAM L. ELKIN, PH.D.		
<i>Astronomer in the Observatory</i>		477 Prospect st.
HERBERT E. SMITH, M.D.		
<i>Professor of Chemistry, and Dean of the Medical School</i>		29 Beers st.
HORATIO M. REYNOLDS, B.A.		
<i>Tutor in Greek</i>		213 D.
FRANK P. GOODRICH, B.A.		
<i>Instructor in German</i>	(187 C.)	26 Trumbull st.
WALTER R. BRIDGMAN, B.A.		
<i>Tutor in Greek</i>		21 S.
J. ERNEST WHITNEY, B.A.		
<i>Instructor in English</i>	(2 TR.)	156 Whitney av.
FRANK F. ABBOTT, B.A.		
<i>Tutor in Latin</i>		153 F.
EDWARD T. McLAUGHLIN, B.A.		
<i>Tutor in English</i>		267 L.
WILLIAM PRICE, B.A.		
<i>Instructor in French</i>		104 Wall st.
ELIAKIM H. MOORE, JR., PH.D.		
<i>Tutor in Mathematics</i>		70 N. M.
HORACE D. TAFT, B.A.		
<i>Tutor in Latin</i>		102 N.
MARK BAILEY, M.A.		
<i>Instructor in Elocution</i>	(150 F.)	442 Temple st.
GUSTAVE J. STOECKEL, Mus.D.		
<i>Instructor in Vocal Music</i>		209 York st.
GOTTLIEB HENESS, M.A.		
<i>Instructor in German</i>		44 Elm st.

- ALBERT S. WHEELER, M.A.
Instructor in German Tremont House
- J. SUMNER SMITH, B.A.
Librarian of the Linonian and Brothers Library (Library) 78 Trumbull st.
- HENRY P. STEARNS, M.D.
Lecturer on Insanity Hartford
- JOHN A. ROBINSON, LL.B.
Librarian of the Law School (19 Court House) 68 E. Pearl st.
- Rev. HENRY CLAY TRUMBULL, D.D.
Lyman Beecher Lecturer on Preaching Philadelphia, Pa.
- SAMUEL B. ST. JOHN, M.D.
Lecturer on Ophthalmology Hartford
- Hon. WILLIAM E. SIMONDS, LL.B.
Lecturer on Patent Law Hartford
- Hon. MORRIS W. SEYMOUR, LL.B.
Lecturer on Corporations Bridgeport
- M. DWIGHT COLLIER, M.A.
Lecturer on Attachments, Judgments, and Executions New York City
- FREDERIC R. HONEY, PH.B.
Instructor in Instrumental Drawing (53 N. S. H.) 14 Lincoln st.
- CHARLES H. FARNAM, M.A.
Assistant in Archaeology 28 Hillhouse av.
- JOHN P. C. FOSTER, M.D.
Instructor in Anatomy 109 College st.
- THOMAS W. MATHER, D.E.
Instructor in Dynamical Engineering 19 Warren pl.
- THOMAS THACHER, M.A., LL.B.
Lecturer on Corporate Trusts New York City
- JAMES M. TOWNSEND, JR., LL.B.
Lecturer on Transfer of Monetary Securities New York City
-
- Instructor in Architecture*
- SAMUEL L. PENFIELD, PH.B.
Instructor in Mineralogy (2 P.) 14 S. H.
- ALTON W. LEIGHTON, M.D.
Assistant in Drawing 215 York st.
- HORACE L. WELLS, PH.B.
Instructor in Analytical Chemistry 14 S. H.

HENRY FLEISCHNER, M.D.	
<i>Lecturer on Dermatology</i>	928 Grand av.
ROGER FOSTER, M.A., LL.B.	
<i>Lecturer on Federal Jurisprudence</i>	New York City
CHARLES E. BEECHER, B.A.	
<i>Assistant in Palaeontology</i>	9 P.
SAMUEL E. BARNEY, C.E.	
<i>Instructor in Mathematics and Civil Engineering</i>	194 Orange st.
HORACE S. KEPHART, M.A.	
<i>Assistant in the Library</i>	(Library) 33 Beers st.
GEORGE BAUR, PH.D.	
<i>Assistant in Osteology</i>	(9 P.) 485 Elm st.
JAY W. SEAVER, M.D.	
<i>Instructor in Gymnastics, and Lecturer on Practical Hygiene</i>	(1 TR.) 233 York st.
FRANK H. WHEELER, M.D.	
<i>Assistant in Pathology</i>	188 Crown st.
WILLIAM G. DAGGETT, M.D.	
<i>Lecturer on Bacteriology</i>	22 College st.
EDWARD V. RAYNOLDS, D.C.L.	
<i>Lecturer on Political Science</i>	62 Trumbull st.
HENRY C. WHITE, M.L.	
<i>Lecturer on Political Science</i>	(828 Chapel st.) 82 Wall st.
CHARLES E. PARK, M.D.	
<i>Assistant in Clinical Surgery</i>	132 Olive st.
LOUIS V. PIRSSON, PH.B.	
<i>Assistant in Analytical Chemistry</i>	14 S. H.
ASAPH HALL, JR., B.A.	
<i>Assistant Astronomer in the Observatory</i>	Observatory
EDWARD G. BOURNE, B.A.	
<i>Lecturer on Political Science, and Instructor in Mediaeval History</i>	36 E.
ROBERT F. HARPER, PH.D.	
<i>Instructor in Semitic Languages</i>	135 College st.
HENRY L. SWAIN, M.D.	
<i>Lecturer on Diseases of the Throat and Ear</i>	159 York st.
G. WYCKOFF CUMMINS, PH.D.	
<i>Instructor in Mathematics</i>	63 W.
THOMAS G. LEE, M.D.	
<i>Lecturer on Histology</i>	113 York st.
ERWIN S. SPERRY, PH.B.	
<i>Assistant in Analytical Chemistry</i>	Ansonia

GRADUATE FELLOWS AND SCHOLARS

JAMES W. BIXLER, B.A., B.D., <i>Hooker Fellow in the Divinity School</i>	110 W.
EDWARD G. BOURNE, B.A., <i>Foote Scholar</i>	36 E.
HENRY E. BOURNE, B.A., B.D., <i>Hooker Fellow in the Divinity School</i>	36 E.
WILBUR L. CROSS, B.A., <i>Foote Scholar, and Proctor</i>	58 S. M.
HERBERT H. WHITE, B.A., <i>Larned Scholar</i>	147 Humphrey st.
CARL D. BUCK, B.A., <i>Scholar of the House</i>	Athens, Greece
WASHINGTON I. HUNT, B.A., <i>Soldiers' Memorial Fellow</i>	57 S. M.
FRANK G. MOORE, B.A., <i>Macy Scholar</i>	57 S. M.
WILLIAM H. PARKS, B.A., <i>Berkeley Scholar, and Bristed Scholar</i>	34 S. M.
WILLIAM W. CREHORE, B.A., <i>Larned Scholar</i>	44 S. M.
GEORGE E. ELIOT, B.A., <i>Clark Scholar</i>	231 D.
HENRY S. WASHINGTON, B.A., <i>Silliman Fellow</i>	174 Orange st.
EVANS WOOLLEN, B.A., <i>Larned Scholar, and Proctor</i>	187 C.
JOHN BENNETTO, B.A., <i>Foote Scholar</i>	257 Orange st.
CARLETON L. BROWNSON, B.A., <i>Douglas Fellow</i>	49 S. M.
JOHN H. CURTIS, B.A., <i>Clark Scholar, and Larned Scholar</i>	91 N. M.
YAN PHOU LEE, B.A., <i>Larned Scholar</i>	(90 N. M.) 24 Gilbert av.

OTHER OFFICERS

LOUIS STADTMÜLLER, PH.B., <i>Clerk in the Sheffield Scientific School</i>	(3 S. H.) 43 Whitney av.
LEWIS E. OSBORN, <i>Clerk in the Treasurer's Office</i>	(5 TR.) 240 Orange st.
FRANK E. HOTCHKISS, <i>Superintendent of Grounds and Buildings</i>	90 High st.
WILLABE HASKELL, PH.D., <i>Superintendent of the Reading Room</i>	(Reading Room) 96 Dwight st.
J. PRESTON STRONG, <i>Clerk in the Treasurer's Office</i>	(5 TR.) 506 Howard av.
WILLIAM L. PHELPS, B.A., <i>Superintendent of Dwight Hall</i>	Dwight Hall
HENRY R. GRUENER, <i>Assistant in the Library</i>	(Library) 39 Whiting st.

GOVERNMENT OF THE UNIVERSITY

The legal designation of the Corporation is "THE PRESIDENT AND FELLOWS OF YALE COLLEGE IN NEW HAVEN;" the powers of this body have been granted and confirmed in the following order.

THE COLLEGIATE SCHOOL OF CONNECTICUT, subsequently named YALE COLLEGE, and now commonly called YALE UNIVERSITY, was founded in the summer of the year 1701 by the combined action of a few of the ministers in Connecticut, who obtained in October of the same year a Charter from the Colony Legislature, which runs as follows:—

AN ACT FOR LIBERTY TO ERECT A COLLEGIATE SCHOOL.

WHEREAS several well disposed, and Publick spirited Persons of their sincere Regard to & Zeal for upholding & Propagating of the Christian Protestant Religion by a succession of Learned & Orthodox men have expressed by Petition their earnest desires that full Liberty and Priveledge be granted unto certain Undertakers for the founding, suitably endowing & ordering a Collegiate School within his Maj^{ty} Colony of Connecticut wherin Youth may be instructed in the Arts & Sciences who thorough the blessing of Almighty God may be fitted for Publick employment both in Church & Civil State. To the intent therefore that all due incouragement be Given to such Pious Resolutions and that so necessary & Religious an undertakeing may be sett forward, supported & well managed:—

BE IT ENACTED by the Govern^r & Company of the s^d Colony of Connecticut, in General Court now Assembled, And it is enacted & ordained by the Authority of the same that there be & hereby is full Liberty, Right and Priveledge Granted unto the Reverend M^r. James Noyes of Stonnington, M^r. Israel Chauncey of Stratford, M^r. Thomas Buckingham of Saybrook, M^r. Abraham Pierson of Kennelworth, M^r. Samuel Mather of Windsor, M^r. Samuel Andrew of Millford, M^r. Timothy Woodbridge of Hartford, M^r. James Pierpont of New Haven, M^r. Noadiah Russel of Middletown, M^r. Joseph Webb of Fairfield, being Rev^d Ministers of the Gospel & inhabitants within y^e s^d Colony,

proposed to stand as Trustees, Partners or Undertakers for the s^d School, to them and their successors, To ERECT, form, direct, order, establish, improve and att all times in all suitable wayes for the future to encourage the s^d School in such convenient place or Places, & in such form & manner & under such order & Rules as to them shall seem meet & most conducive to the afores^d end thereof, so as such Rules or Orders be not Repugnant to the Laws of the Civil Governm^t, as also to imploy the moneys or any other estate which shall be Granted by this Court or otherwise Contributed to that use according to their discretion for the benefit of the s^d Collegiate School from time to time & att all times henceforward.

And be it further ENACTED by the Authority afores^d that the before named Trustees, Partners or Undertakers together with such others as they shall associate to themselves (not exceeding the number of Eleven, or att any time being less than Seven, Provided also that Persons nominated or associated from time to time to fill up s^d number be ministers of the gospel inhabiting within this Colony & above the Age of forty years) or the major Part of them, the s^d M^r. James Noyes, [etc.] undertakers, & of such Persons so chosen & associated as aboves^d att any time hereafter, HAVE and shall have henceforward the oversight, full & compleat Right, Liberty, power & Priveledge to furnish, direct, manage, order, improve & encourage from time to time & in all times hereafter the s^d Collegiate School so Erected & formed by them in such ways, orders & manner & by such Persons, Rector or Master and officers appointed by them, as shall according to their best discretion be most conducive to attaine the afores^d mentioned end thereof.

It is also further Enacted by the Authority afores^d that the s^d Undertakers & Partners & their successors be & hereby are further impowered to have, accept, acquire, purchase or otherwise lawfully enter upon Any Lands, Tenements & Hereditam^{ts} to the use of the s^d School, not exceeding the value of five hundred Pounds p^r Anⁿi, & any Goods, Chattels, Sum or Sums of money whatsoever as have heretofore already been Granted, bestowed, bequeathed or given, or as from time to time shall be freely given, bequeathed, devised or settled by any Person or Persons whatsoever upon & to & for the use of y^e s^d School towards the founding, erecting or endowing the same, & to sue for, Recover & receiv all such Gifts, Legacies, bequests, annuities, Rents, issues & profits arising therefrom & to imploy the same accordingly, & out of y^e estate, Revenues, Rents, profits, incomm accruing & belonging to s^d School to support & pay as the s^d Undertakers shall agree & see cause, the s^d Rector or Master, Tutors, Ushers or other officers their Respective annual Salaries or Allowances. As also for the encouragem^t of the Students to grant degrees or Licences as they or those deputed by them shall see cause to order & appoint.

Under this Charter the Collegiate School was begun at Saybrook, in November, 1701, where it continued until its removal to New Haven, in October, 1716. In September, 1718, the name of YALE COLLEGE was given by the Trustees to the School, in honor of the benefactions of ELIHU YALE, of London, lately Governor of the East India Company's settlement at Madras.

In 1723 an "ACT IN EXPLANATION OF AND ADDITION TO THE ACT FOR ERECTING A COLLEGIATE SCHOOL" was passed by the General Assembly, with the following provisions:—

WHEREAS Pursuant to the Powers and Priviledges granted to Certain Trustees for Erecting a Collegiate School in this Colony Entituled an Act for a Collegiate School, the Said Trustees have Erected the Said School in the Town of New-Haven which School is now known by the Name of Yale Colledge; And Whereas it appears to this Assembly that an Explanation and Enlargement of the powers and priviledges granted by Said Act is Necessary for the Carrying on, the Affairs of the Said Colledge, for want of which it has Laboured under great difficulties very much to the prevention of that Order and good Education which is to be desired there:

Bee it therefore Enacted by the Governour, Council and Representatives in Generall Court assembled and by the Authority of the Same that the Said Act which provides that the Number of the Said Trustees be not under Seven nor above Eleven is not to be Understood or Taken so as to be restrictive of the power of the Said Trustees Never to Choose any person to be a Trustee, when there is of Such persons as have been Chosen and Acted as Trustees Eleven persons Living in the Colony or Elsewhere, but that in Case any person so Chosen be by Providence Incapacitated from attending that Service or shall himself decline the Same thro' the Necessity of his own Affairs or for any other such Reason as he shall Judge requisite, the Trustees in any of their Meetings Lawfully Called may be Understood to have and it is hereby Enacted and declared that they shall be Taken to have full power by the Majority of Such Meeting to proceed to the Choice of Another Trustee in the Room of any such person. And it is hereby further declared and Enacted to be the True Intent and Meaning of the Act afores^d that the said Trustees shall be Impowered and they are hereby declared to have power to Meet Together for Considering, Advising about and Resolving upon all Matters belonging to the Trust of the Said Colledge committed unto them as afores^d and to Agree and Conclude, Order and determine Concerning them by the Majority of the



Said Meeting, and by the same Majority to Choose and Appoint a Clerk who shall, in a fair book prepared for that End, Register and Carefully preserve the Acts of all such Meetings.

And WHEREAS it has been doubted what Number of the Said Trustees may be Lookt upon as a Sufficient or full Meeting, Inasmuch as there is not in the afores^d Act any Express mention made of any Meeting of the said Trustees ; It is therefore to prevent all Scruple of that kind for the future hereby provided and declared that due Notice being given to the Trustees by Consent of any three of them of a Meeting of the Trustees desired at any Time or place, any Seven or more of the Trustees present at such Time and place shall be Esteemed a full Meeting. And it is hereby declared and Enacted that in all such Meetings, so Called, or Otherwise as the said Trustees in any such Meeting shall agree, all affairs under the Care of the said Trustees shall be determined by the Majority of such Meeting.

And WHEREAS it has been found Inconvenient that in the Election of Persons to be Trustees, the Trustees Election by the afores^d Act should be Limited and restrained so as that the Person who shall be Chosen must Necessarily be fourty Years of age ; It is hereby declared and Enacted that for the future the said Trustees in any Election of a person into that Trust shall not be Esteemed or held Obligated by said Act to Choose such a person as shall be above fourty Years of Age, but may Choose such a person otherwise Qualifyed According to said Act, Provided he is thirty Years of Age. And it is further hereby Allowed, Enacted, Granted and Provided that whosoever shall be Chosen and made a Rector of the said Colledge shall by Virtue thereof become a Trustee of the same and be so Esteemed and Taken during his Continuance in the said Rectorship.

In 1745 a thoroughly revised Charter was granted by the Assembly, the permanent provisions of which are as follows:—

An ACT for the more full and complete Establishment of YALE COLLEGE in NEW HAVEN, and for enlarging the powers and Privileges thereof.

WHEREAS upon the Petition of several well disposed and public-spirited Persons expressing their desire that full Liberty and Privilege might be granted unto Certain Undertakers for the founding, suitably endowing and ordering a *Collegiate School*, within this Colony, wherein Youth might be instructed in the Arts and Sciences, the Governor and Company of the said Colony in General Court assembled at *New Haven*, on the Ninth Day of October, in the Year of our Lord

1701, Granted unto the Rev'd Messrs. *James Noyes* [etc.], who were proposed to stand as Trustees, Partners or Undertakers for the Society, and to their Successors, full Liberty, Right and Privilege to erect, form, direct, order, establish, improve, and at all Times in all suitable Ways to encourage the said School in some convenient Place in this Colony and granted sundry Powers and Privileges for the attaining the End aforesaid ;

And Whereas the said Trustees, Partners or Undertakers in pursuance of the aforesaid Grant, Liberty and License, founded a *Collegiate School* at *New Haven*, known by the Name of *YALE COLLEGE*, which has received the favorable Benefactions of many liberal and piously disposed Persons, and under the Blessing of Almighty God has trained up many worthy Persons for the Service of God in the State as well as in the Church ;

And Whereas the General Court of this Colony assembled at *New Haven*, the Tenth Day of October, in the Year of our Lord 1723, did explain and enlarge the aforesaid Powers and Privileges granted to the aforesaid Partners, Trustees or Undertakers and their Successors, for the Purpose aforesaid ; as by the respective Acts, reference thereto being had, more fully and at large may appear ;

And Whereas the Rev'd Messrs. *Thomas Clap*, *Samuel Whitman*, *Jared Eliot*, *Ebenezer Williams*, *Jonathan Marsh*, *Samuel Cooke*, *Samuel Whittelsey*, *Joseph Noyes*, *Anthony Stoddard*, *Benjamin Lord*, and *Daniel Wadsworth*, the present Trustees, Partners and Undertakers of the said School, and Successors of those beforementioned, have petitioned, that the said School, with all the Rights, Powers, Privileges and Interests thereof, may be confirmed, and that such other additional Powers and Privileges may be granted as shall be necessary for the Ordering and Managing the said School in the most advantageous and beneficial Manner for the promoting all good Literature in the present and succeeding Generations :

Therefore,

THE GOVERNOR and COMPANY of his Majesty's said English Colony of *Connecticut* in General Court assembled, this Ninth Day of *May*, in the Year of our Lord 1745, enact, ordain, and declare, and by these Presents it is enacted, ordained and declared—

That the said *Thomas Clap* [etc.], shall be an *Incorporate Society or Body Corporate and Politic*, and shall hereafter be called and known by the name of *THE PRESIDENT AND FELLOWS OF YALE COLLEGE IN NEW HAVEN*, and that by the same Name they and their Successors shall and may have perpetual Succession, and shall and may be Persons in the Law capable to plead and be impleaded, defend and be defended, and answer and be answered unto ; and also to have, take, possess, acquire, purchase or otherwise receive Lands, Tenements, Hereditaments, Goods, Chattels, or other Estates, and the same Lands, Tenements,

Hereditaments, Goods, Chattels or other Estates to grant, demise, lease, use, manage or improve for the Good and Benefit of the said *College*, according to the Tenor of the Donation, and their Discretion.

That all Gifts, Grants, Bequests, and Donations of Lands, Tenements, or Hereditaments, of Goods and Chattels heretofore made to or for the Use, Benefit and Advantage of the *Collegiate School* aforesaid, whether the same be expressed to be made to the President or Rector, and to the rest of the Incorporate Society of *Yale College*, or to the Trustees or Undertakers of the *Collegiate School in New Haven*, or to the Trustees by any other Name, Style or Title whatsoever, whereby it may be clearly known and understood that the true Intent and Design of such Gifts, Grants, Bequests and Donations, was to or for the Use, Benefit and Advantage of the Collegiate School aforesaid, and to be under the Care and Disposal of the Governors thereof, shall be confirmed, and the same hereby are confirmed, and shall be and remain to, and be vested in the President and Fellows of the *College* aforesaid, and their Successors, as to the true and lawful Successors of the original Grantees.

That the said PRESIDENT AND FELLOWS and their Successors shall and may hereafter have a common Seal, to serve and use for all Causes, Matters and Affairs of them and their Successors, and the same Seal to alter, break and make new as they shall think fit.

That the said THOMAS CLAP shall be, and he is hereby established the present PRESIDENT, and the said *Samuel Whitman*, [etc.] shall be, and they are hereby established the present FELLOWS of the said *College*, and that they and their Successors shall continue in their respective Places during Life, or until they or either of them shall resign, or be removed, or displaced, as in this Act is hereafter expressed.

That there shall be a General Meeting of the *President and Fellows* of said *College*, in the College Library on the second Wednesday of September annually, or at any other Time and Place which they shall see Cause to appoint, to consult, advise and act in and about the Affairs and Business of the said *College*; and that on any special Emergency, the President and two of the Fellows, or any four of the Fellows, may appoint a Meeting of the said *College*, provided they give Notice thereof to the Rest by Letters sent and Left with them, or at the Places of their respective Abode, five Days before such Meeting; and that the President and six Fellows, or in Case of the Death, Absence, or Incapacity of the President, seven Fellows, convened as aforesaid (in which Case the eldest Fellow shall preside), shall be deemed a Meeting of the President and Fellows of said *College*, and that in all the said Meetings, the Major Vote of the Members present shall be deemed the Act of the Whole, and where an Equivote happens, the President shall have a casting Vote.

That the President and Fellows of the said *College* and their Successors, in any of their Meetings assembled as aforesaid, shall and may

from Time to Time, as Occasion shall require, elect and appoint a President or Fellow in the Room and Place of any President or Fellow who shall die, resign, or be removed from his Office, Place or Trust (whom the said Governor and Company hereby declare, for any Misdemeanor, Unfaithfulness, Default or Incapacity, shall be removable by the President and Fellows of the said College; Six of them, at least, concurring in such Act); and shall have Power to appoint a Scribe or Register, a Treasurer, Tutors, Professors, Steward and all such other Officers and Servants, usually appointed in Colleges or Universities, as they shall find necessary and think fit to appoint for the promoting good Literature, and the well ordering and managing the Affairs of said College; and them or any of them, at their Discretion, to remove; and to prescribe and administer such Forms of Oaths (not being contrary to the Laws of England or of this Colony) as they shall think proper, to be administered to all the Officers and Instructors of the said College, or to such and so many of them as they shall think proper, for the faithful Execution of their respective Places, Offices and Trusts.

That the President and Fellows shall have the Government, Care and Management of the said College and all the Matters and Affairs thereunto belonging, and shall have Power from Time to Time, as Occasion shall require, to make, ordain and establish all such wholesome and reasonable Laws, Rules and Ordinances, not repugnant to the Laws of England, nor the Laws of this Colony, as they shall think fit and proper for the Instruction and Education of the Students, and Ordering, Governing, Ruling and Managing the said College, and all Matters, Affairs, and Things thereunto belonging, and the same to Repeal and alter as they shall think fit.

That the President of said College, with the Consent of the Fellows, shall have Power to give and confer all such Honors, Degrees or Licenses as are usually given in Colleges or Universities, upon such as they shall think worthy thereof.

In 1792 a grant of money from the State of Connecticut was received, upon the condition that certain State officials should become members of the board of Fellows, as below expressed:—

In case this grant shall be accepted, in manner as hereinafter provided, the Governor, Lieutenant Governor, and six senior assistants in the Council* of this State, for the time being, shall ever hereafter, by virtue of their said offices, be Trustees or Fellows of said college; and shall together with the present President and Fellows of said College, and their successors, constitute one corporation, by the name and style

* Changed in 1819 to the six senior senators.

mentioned in the charter of said College ; and shall have and enjoy the same powers, privileges, and authority, in as full and ample a manner, as though they had been expressly named and included in said charter ; And that in case of vacancy, by the death, or resignation, or in any other way, of any of the present Fellows of said College, and their successors, every such vacancy shall forever hereafter be supplied by them, and their successors, by election, in the same manner as though this act had never passed.

In the new Constitution of the State, adopted in 1818, the privileges conferred by the Charter were reaffirmed, as follows :—

ARTICLE VIII, SECT. I.

The charter of Yale College, as modified by agreement with the Corporation thereof, in pursuance of an Act of the General Assembly, passed in May, 1792, is hereby confirmed.

In 1872, at the request of the Corporation, an Act was passed by the General Assembly, providing (as follows) for the substitution of graduates in the place of the six senators among the Fellows :—

SECTION 1.—All graduates of the first degree, of five or more years' standing, in any of the departments of Yale College, and all persons who have been admitted to any degree higher than the first in Yale College, whether honorary or in course, may, on the day next preceding the public commencement day of said College, in the year of our Lord 1872, cast their votes, under such regulations as the President and Fellows may prescribe, for six persons to be chosen from among such graduates ; and the six persons who shall be found to be elected by a plurality of the votes cast, shall be the Fellows of Yale College in the stead of the six senior senators of the State, and shall have all the rights, duties, and privileges as Fellows which are now by law conferred upon said senators. In case of an equality of votes between two or more candidates, the person who shall hold the said office of Fellow shall be designated by lot from among the persons receiving such equality of votes.

SECTION 2.—The Fellows thus elected shall enroll themselves by lot in six classes, one holding the office for six years, another for five years, another for four years, another for three years, another for two years, and another for one year, eligible for re-election ; and every year as a vacancy occurs, all graduates of the first degree, of five or more years' standing

in any of the departments of Yale College, and all persons who have been admitted to any degree higher than the first in Yale College, whether honorary or in course, may, upon the day next preceding commencement day, in the manner heretofore prescribed, elect by a plurality of votes a person to fill the vacancy, and hold the office of Fellow for a period of six years, eligible for re-election ; and so whenever a vacancy shall occur from death, resignation, or any other cause, such graduates may elect a person at the next commencement to fill the office of Fellow for the remainder of the term in which a vacancy has occurred. The official year of such Fellows shall end with the day next preceding each commencement day.

In January, 1887, an Act passed the General Assembly of the State, authorizing the use of the title "Yale University" by the President and Fellows of Yale College, and providing that gifts to, contracts with, conveyances to or by, and other acts affecting said Corporation by either of the names specified shall be valid.

DEPARTMENTS OF INSTRUCTION

The courses of study offered in the University are comprehended in four Departments, under the control of the Corporation, each Department being also under the administration of a distinct Faculty of instruction. The Departments are as follows:—

THE DEPARTMENT OF PHILOSOPHY AND THE ARTS,
THE DEPARTMENT OF THEOLOGY,
THE DEPARTMENT OF MEDICINE,
THE DEPARTMENT OF LAW.

Under the first-named Department are included two separately organized sections in which instruction for undergraduates is provided, viz:—

THE ACADEMICAL DEPARTMENT, and
THE SHEFFIELD SCIENTIFIC SCHOOL;

also, THE SCHOOL OF THE FINE ARTS, with a special organization; and The Courses for GRADUATE INSTRUCTION, under the combined Faculty of the Department.

It is to be understood that the courses of instruction above described are open to persons of the male sex only, except when both sexes are specifically included.

The LIBRARY, the PEABODY MUSEUM OF NATURAL HISTORY, and the OBSERVATORY are severally organized independently of the special Departments, and are designed to contribute, in their appropriate spheres, to the instruction and advancement of the whole institution.

ACADEMICAL DEPARTMENT

(YALE COLLEGE)

FACULTY

REV. TIMOTHY DWIGHT, D.D., LL.D., PRESIDENT
REV. NOAH PORTER, D.D., LL.D., *Professor of Moral Philosophy and Metaphysics*
ELIAS LOOMIS, LL.D., *Professor of Natural Philosophy and Astronomy*
JAMES D. DANA, PH.D., LL.D., *Professor of Geology and Mineralogy*
EDWARD J. PHELPS, LL.D., *Professor of Law*
HUBERT A. NEWTON, LL.D., *Professor of Mathematics*
ARTHUR M. WHEELER, M.A., *Professor of History*
J. WILLARD GIBBS, PH.D., *Professor of Mathematical Physics*
ARTHUR W. WRIGHT, PH.D., *Professor of Experimental Physics*
EUGENE L. RICHARDS, M.A., *Assistant Professor of Mathematics*
WILLIAM I. KNAPP, PH.D., *Professor of Modern Languages*
FRANKLIN B. DEXTER, M.A., *Professor of American History, and Registrar*
TRACY PECK, M.A., *Professor of Latin*
REV. CORNELIUS L. KITCHEL, M.A., *Instructor in Greek*
WILLIAM G. SUMNER, LL.D., *Professor of Political and Social Science*
REV. GEORGE T. LADD, D.D., *Professor of Mental and Moral Philosophy*
HENRY P. WRIGHT, PH.D., *Professor of Latin, and Dean*
HENRY A. BEERS, M.A., *Professor of English Literature*
EDWARD S. DANA, PH.D., *Assistant Professor of Natural Philosophy*
THOMAS D. SEYMOUR, M.A., *Professor of Greek*
FRANK A. GOOCH, PH.D., *Professor of Chemistry*
WILLIAM L. CUSHING, M.A., *Instructor in Latin*
WILLIAM BEEBE, B.A., *Assistant Professor of Mathematics and Astronomy*
ANDREW W. PHILLIPS, PH.D., *Assistant Professor of Mathematics*
GEORGE BENDELARI, B.A., *Assistant Professor of Modern Languages*
ALFRED L. RIPLEY, B.A., *Assistant Professor of German*
HORATIO M. REYNOLDS, B.A., *Tutor in Greek*
FRANK P. GOODRICH, B.A., *Instructor in German*
WALTER R. BRIDGMAN, B.A., *Tutor in Greek*

J. ERNEST WHITNEY, B.A., *Instructor in English*
FRANK F. ABBOTT, B.A., *Tutor in Latin*
EDWARD T. McLAUGHLIN, B.A., *Tutor in English*
ELIAKIM H. MOORE, JR., PH.D., *Tutor in Mathematics*
HORACE D. TAFT, B.A., *Tutor in Latin*

OTHER INSTRUCTORS

WILLIAM D. WHITNEY, PH.D., LL.D., *Professor of Comparative Philology
and Sanskrit*
MARK BAILEY, M.A., *Instructor in Elocution*
WILLIAM C. ROBINSON, LL.D., *Professor of Law*
DANIEL C. EATON, M.A., *Professor of Botany*
JAMES K. THACHER, M.D., *Professor of Zoology*
WILLIAM R. HARPER, PH.D., *Professor of the Semitic Languages*
REV. JOHN E. RUSSELL, M.A., (*Professor of Biblical Theology*), *Instructor
in Logic*
ARTHUR T. HADLEY, M.A., *Professor of Political Science*
JAY W. SEAVER, M.D., *Instructor in Gymnastics and Practical Hygiene*
EDWARD G. BOURNE, B.A., *Instructor in Mediaeval History*

From the date of the original Charter, in 1701, a course of instruction leading to the degree of Bachelor of Arts has been continuously offered at the College; at first only three years of undergraduate study were required, but before 1710, a four years' course was provided, which has been since maintained.

Until 1813, when a Medical School was organized, no other course of study for a degree was marked out at Yale College; but with the incorporation of the Medical Institution (as it was originally styled) the older Department began to be designated The Academical Institution (or Department), and has continued to be so designated until at length, with the growth of other Schools about it and the expansion of the whole into Yale University, the original title of Yale College has again come to be applied distinctively to this Department.

TERMS OF ADMISSION.

ALL CANDIDATES FOR ADMISSION to the Freshman Class are examined in the following books and subjects :

1. Latin Grammar.
 2. Caesar—Gallic War, books i-iv.
 3. Cicero—Orations against Catiline and for Archias, and, in addition, either the Marcellus and the 14th Philippic, or the Milo, or the Manilian Law, or the Cato Major.
 4. Vergil—Bucolics, and first six books of the Aeneid, including Prosody.
 5. Ovid—Metamorphoses, translation at sight.
 6. The translation, at sight, of passages from prose Latin.
 7. The translation into Latin of connected passages of English prose. [As special importance is given to this part of the examination, it is suggested to teachers that they connect exercises in making Latin, both oral and written, with all the Latin studies of the preparatory course.]
 8. Roman History, to the death of Augustus.
-
9. Greek Grammar.
 10. Xenophon—Anabasis, four books.
 11. Homer—Iliad, three books, with Prosody.
 12. The translation, at sight, of a passage from some work of Xenophon.
 13. The translation of English into Greek : Jones's Exercises, White's Lessons, and Keep's Lessons are suggested, as indicating the preparation required.
 14. Greek History.
-
15. Higher Arithmetic—including the metric system of weights and measures.
 16. Algebra—so much as is included in Loomis's Treatise, up to the chapter on Logarithms.
 17. Plane Geometry.
-
18. French or German—so far as to translate at sight easy prose, the candidate being at liberty to decide for himself in which of the two languages he shall be examined.

Candidates are allowed to divide the examination, with an interval of not less than one year between the two parts. In such cases, they must present themselves at the *June* examination of the first year; and at this preliminary examination each candidate must submit a definite statement from his principal instructor of the subjects which he is authorized to offer. No candidate will be allowed to offer French, German, Geometry, the translation at sight of prose Latin, or of prose Greek, at a preliminary examination; and at the close of such an examination, no certificate of partial admission will be furnished, unless at least six subjects have been satisfactorily passed.

THE REGULAR EXAMINATION FOR ADMISSION to College is held at Alumni Hall, New Haven, on Thursday, Friday, and Saturday after Commencement (June 28, 29, 30, 1888): *attendance is required at the opening of the examination, at 9 A. M. on Thursday*, and the sessions will close Saturday noon. The examination is wholly in writing; a set of papers recently given will be sent by the Secretary on application.

In 1888 examinations (beginning on Thursday, June 28, at 9 A. M., and closing Saturday noon) for admission to the Freshman Class (but not to higher classes) will also be held in Exeter, N. H., Andover, Mass., New York City, Chicago, Cincinnati, and San Francisco, at places to be announced in the local newspapers of the day previous. Candidates who propose to be present (elsewhere than at New Haven) are requested to send their names to the Secretary before June 15. A fee of five dollars is charged for admission to examinations outside of New Haven. The College is also prepared to hold an examination, at the above-named time, in any city or at any school where the number of candidates and the distance from other places of examination may warrant it; applications for this purpose must be sent to the Secretary before May 15.

A second examination is held in New Haven at the beginning of the College year, on Tuesday and Wednesday (Sept. 18, 19, 1888); candidates for this examination must be present at Alumni Hall at 9 A. M. on Tuesday.

Persons applying for admission to any of the classes in College during the course of the College year (that is, from September to June) must first obtain from the Faculty permission to be examined, and pay to the Treasurer a fee of ten dollars.

In general, examinations for admission to the next Freshman Class can be held only in June and September as specified; if in any case sufficient reason exists for an exception to this rule, a special fee (not exceeding fifty dollars) will be charged.

ADVANCED STANDING—All candidates for advanced standing, *whether from other Colleges or not*, are examined, in addition to the preparatory studies, in those studies already pursued (see pp. 32 ff.) by the class which they wish to enter. In the several languages, for the particular books studied by the class equivalent amounts from other books may be offered. Certificates of standing elsewhere cannot be accepted in place of these examinations, although they may be taken into account as collateral evidence of fitness for admission.

Bachelors of Arts or of Philosophy of any institution may join the Senior Class (without examination and without becoming candidates for the Bachelor's degree), as candidates for the degree of Doctor of Philosophy after three years' study.

No one can be admitted to the Senior Class after the beginning of the second term.

AGE—No one can be admitted to the Freshman Class till he has completed his fifteenth year, nor to an advanced standing without a corresponding increase of age.

TESTIMONIALS—Satisfactory testimonials of good moral character (preferably from the last principal instructor) are in all cases required, before a certificate of admission in full can be granted. Students from other Colleges must present certificates of dismissal in good standing.

BOND—Every person must give to the Treasurer, on being admitted, a bond, executed by his parent or guardian, for five hundred dollars, as security for the payment of

charges arising under the laws of the College. A blank form for this purpose will be furnished at the time of admission.

GOVERNMENT AND INSTRUCTION

The Dean has the general supervision under the Faculty of the Senior and Junior Classes; the members of the two lower Classes are assigned by divisions for a similar supervision to the care of the several instructors in those Classes. Absence from College exercises will be excused only for extremely urgent reasons. In general, a student cannot be excused for absence at the beginning or near the end of a term.

In order to cover all cases of absence which may seem justifiable to the student, but for which no excuses will be accepted, an allowance is granted to a member of the Senior or Junior Class of absence from eight class-room exercises (recitations, lectures, or rhetorical appointments), and to a member of the Sophomore or Freshman Class from six class-room exercises, during the first term and during each half of the second term, without incurring marks and without affecting his record for scholarship; provided that these absences shall not immediately precede or follow a vacation or recess; provided, also, that no two absences shall be consecutive in any one study, and that such absences shall not excuse the student from preparation upon the omitted lessons when reviewed.

The members of each of the three lower classes are arranged at the beginning of each term in divisions according to scholarship. During the present year, for required work the Senior Class is divided into two divisions, the Junior Class into three, the Sophomore Class into five, and the Freshman Class into six divisions; in the elective courses, the divisions are of convenient size for class-room work.

Greek, Latin, Mathematics, and English, occupy thirteen hours of class-room work per week in Sophomore year and the first term of Freshman year, and twelve

hours per week during the second term of Freshman year. Three hours of class-room work per week during Freshman year, and two hours per week during Sophomore year, are given to Modern Languages.

If a student can pass a satisfactory examination in any of the prescribed studies for the work of one year in advance, he may be allowed to choose from the list of Electives (see p. 35) some other course which he is qualified to pursue with advantage, covering the same number of hours.

In the Freshman and Sophomore years all the work is *prescribed*. The kind and amount of study in these two years are believed to be such as are essential for laying the foundation of a liberal education, whatever the department or profession that may be pursued in after-life; and no more than is needed to give the student a proper basis of knowledge and discipline for the study of the *elective* courses which follow, and that knowledge of himself, and of the subjects before him which is needed for a judicious choice. The basis is necessarily a broad one. The only prominent departments not now in this foundation, either in the preparatory or college work, though pursued in the later elective courses, are those of the Natural Sciences and Chemistry. As some knowledge of these departments, of their methods of reasoning, of the use of the words "species" and "genus," and some idea of the system of nature is essential to the student of almost any branch of philosophy, as well as to those who may take the elective courses in these sciences, it is recommended that the student should include the study of the elements of some departments of the Natural Sciences, and of Chemistry, in his preparation for College.

Of the work of the Junior year a little more than half and of that of the Senior year four-fifths is in elective courses. The whole number of elective studies open to the two classes is at the present time ninety-two; and in addition there are several courses of lectures, attendance on which is optional. The Juniors have open to them

elective studies in the English language and Literature, History, Political Science, and the Natural Sciences, in addition to those in the departments of the Classics, the Modern Languages, and Mathematics; and the Seniors, electives under all these departments, along with others of higher range as particularly explained below.

Many of the courses fall naturally into groups: as that of the Ancient Languages and Linguistics; Psychology, Logic, and Philosophy, with Ethics; Political Science and Law; History; Modern Languages and Literature; Mathematics and Physics; Chemistry and the Natural Sciences; and the student is recommended to select his courses as far as possible according to his needs, in part perhaps according to his expectations as to future work, fixing first upon the chief subject, and selecting others that are subsidiary to it. In several cases, related courses are accessible to the student only as they are taken consecutively.

To promote the rational choice of elective courses, SPECIAL HONORS in the various groups of studies are offered, to be given at the end of the Senior year, in accordance with the scheme on a later page.

THE PROGRAM OF STUDIES for the current year is as follows:

FRESHMAN YEAR:

Greek—Two books of Homer's Iliad; three books of Homer's Odyssey; the Alcestis of Euripides; the first book of Herodotus; Xenophon's Cyropaedia; Greek Prose Composition. (Students especially proficient in Greek will be assigned to an advanced section.)

Latin—Cicero *De Senectute* and *De Amicitia*; Livy, books xxi and xxii; the Satires of Horace; Latin Prose Composition; Early Roman History (through the Second Punic War).

French or German—Three hours a week throughout the year. Students may at their option either continue the study of the modern language presented for admission to college, or begin the study of German in case they have not previously pursued it. Those who have sufficient knowledge of either language will be assigned to classes still further advanced.

Mathematics—In *Geometry*: Planes, Polyhedrons, Cones, Cylinders, and Spheres. Projection of figures with exercises on Models. Text-book, Chauvenet's *Geometry*.

Plane Trigonometry: Solution of Triangles, Mensuration and Surveying. Text-book, Richards's *Trigonometry*.

Algebra: The Geometrical interpretation of the Theory of Equations, Imaginaries, and the Solution of Higher Equations. Text-book, Phillips & Beebe's *Graphic Algebra*.

SOPHOMORE YEAR:

Greek—The first book of Thucydides; Oedipus Tyrannus of Sophocles; Seven against Thebes of Aeschylus; Bacchantes of Euripides; Clouds of Aristophanes.

Latin—Agricola and Germania of Tacitus; Odes and Epodes of Horace (70 pp.); Selections from Catullus (40 pp.); Mostellaria of Plautus; Andria of Terence; selections from the Annals of Tacitus; Roman Antiquities.

Modern Languages—Advanced French, or advanced German, at the option of the student, two hours a week throughout the year. Those who so desire may begin the study of German, in case they have never pursued it.

Mathematics—*Trigonometry*: Trigonometric Analysis. Spherical Trigonometry. Applications to Navigation and Astronomy. Text-book, Richards's *Trigonometry*.

Analytical Geometry: Plane and Solid, with Applications to Map Projection. Text-book, Loomis's *Analytical Geometry*.

Mechanics—The elementary principles of Kinematics, Kinetics (or Dynamics), and Statics, in reference to solid bodies, with practical applications. Text-book, Dana's *Mechanics*.

English Literature—Shakspeare: *1 Henry IV.*, *Twelfth Night*, *Julius Caesar*, *Hamlet*, and *Tempest*. Essayists: see *Rhetoric*.

Rhetoric—Selections from leading English essayists from Addison to Ruskin, with rhetorical analysis; connected through the 1st Term with weekly exercises in extempore composition. During the remainder of the year, five essays.

JUNIOR AND SENIOR YEARS:

The *prescribed* courses of Junior year occupy seven hours per week, and those of Senior year three hours per week. In addition, each member of the Junior class is required to select eight hours per week, and each member of the Senior class twelve hours per week, from the list of *elective* courses.

PRESCRIBED STUDIES OF JUNIOR YEAR :

Physics—Ganot's *Physics*: during the first term the subjects of Liquids, Gases, Sound, and Light, and part of the subject of Heat, with experimental illustrations in the class-room; during the second term, Heat continued, followed by Electricity and Magnetism, with weekly experimental lectures on these three subjects.

Astronomy—Loomis's *Treatise on Astronomy*.

Logic—Jevons's *Lessons in Logic*; Fowler's *Inductive Logic*; exercises in the criticism of arguments; lectures.

Psychology—Porter's *Elements of Intellectual Science*, Introduction, First and Second Parts; Lotze's *Outlines of Psychology*; lectures.

PRESCRIBED STUDIES OF SENIOR YEAR :

Psychology—Porter's *Elements of Intellectual Science*, Third and Fourth Parts; Lotze's *Outlines of Psychology*; lectures.

Ethics—Porter's *Elements of Moral Science*.

Theism, and the Evidences of Christianity—lectures.

RHETORIC AND ELOCUTION :

Rhetoric—English Composition. Four or five themes a year are required from each member of the Senior, Junior, and Sophomore classes; these themes are read and corrected by the instructors in Rhetoric. For premiums in this department see p. 65.

Elocution—Sophomore Year: Lectures on the Science and Art of Elocution,—logical analysis,—vocal analysis, expression, and culture,—oratorical action. Practice in speaking and recitation by sub-divisions of twelve each. Individual instruction and private drill in preparation for speaking in divisions of eighteen per week before the class and the Professor of Rhetoric for the "Prizes for Declamation."

Junior Year: Three weeks of preparatory training for the speakers at the Junior Exhibition.

Senior Year: Three weeks of preparatory training for the speakers at Commencement.

ELECTIVE COURSES

Juniors select eight hours per week, and Seniors twelve hours per week, from the following list. All the courses are open to members of either class, unless some limitation is specified. The number of hours specified means, in every case, hours per week. When a course is stated as occupying "both terms," it cannot, if chosen, be abandoned during the year.

I. MENTAL AND MORAL SCIENCE

Ex-President PORTER :—

- 1 *Philosophy.* [Seniors.] 2 hrs. 1st term.
Locke and his critics.
- 2 *Philosophy.* [Seniors.] 2 hrs. 1st term.
J. S. Mill on Sir William Hamilton.
- 3 *Ethics.* [Seniors.] 2 hrs. 2d term.
History and criticism of modern theories.

Professor LADD :—

- 4 *Physiological Psychology.* 2 hrs. both terms.
A study (illustrated by charts and models) of the human nervous mechanism, of the principal relations which exist between changes in this mechanism and the activities of the mind, and a discussion of the conclusions which may be drawn from these relations respecting the nature and laws of the mind.
- 5 *Modern Philosophy.* [Seniors.] 2 hrs. both terms.
A survey of the development of philosophical thought from Descartes to Lotze and Herbert Spencer, with a special examination of the main problems of philosophy, in the form in which they were brought forward by Kant, and have been discussed subsequently with reference to his philosophical thinking.

II. POLITICAL SCIENCE AND LAW

Professor SUMNER :—

- 8 *Political Economy.* 2 hrs. both terms.
Mill and Cairnes, and selected chapters from Fawcett.
- 9 *Political Economy.* 3 hrs. both terms.
Mill and Cairnes, with selected passages from Adam Smith, Jevons, and Marshall, and study of economic problems which illustrate and apply the principles; theses and discussions.
- 10 *Political Economy.* 2 hrs. both terms.
Elementary text-books on Political Economy and American currency and banking.
- 11 *Political Economy.* 3 hrs. both terms.
Fawcett; Jevons on Money, and American currency and banking.
The above four courses cover the same ground, viz: the elements of Political Economy. There are two long, and two short

courses. The two long courses are so distinguished that one makes far more demands on the powers and industry of the student than the other. A similar distinction is made between the two short courses. All use text-books and have set lessons, but the work of course 9 is so planned as to demand more independent exertion on the part of the student than any other. Either of the long courses taken in Junior year is the proper introduction to a course of study in this general department. Either of the short courses (which may be taken in either year according to convenience), will give a knowledge of the elements of Political Economy to one whose attention is chiefly devoted to some other line of study.

12 *Finance.* [Seniors.] 1 hr. both terms.

A second-year course in money, banking, public debts, foreign exchange and taxation. The exercises will consist of papers on assigned topics. Open only to those who have taken Political Economy.

13 *Anthropology.* [Seniors.] 1 hr. both terms.

A very elementary course in pre-historic science and the origin of civilization; introduction to ethnology and sociology. Tylor's *Anthropology*. Open only to those who have taken Political Economy.

Professor HADLEY :—

14 *Industrial History of the United States since 1850.*

[Seniors.] 2 hrs. 1st term.

Open only to those who have studied Political Economy and are ready to do original work in collecting and arranging statistics.

15 *Modern Economic Theories.* [Seniors.] 2 hrs. 2d term.

An account of some of the attacks upon the current doctrines of Political Economy, especially on the part of the socialists. Open only to those who have completed a course in Political Economy.

Professor ROBINSON :—

16 *Municipal and International Law.* [Sen.] 2 hrs. both terms.

The course will consist of lectures, select readings, recitations and periodical examinations on the following topics in the order given: Law in its relations to the origin and development of political society; law in its relations to the government of political society; origin and development of the common law; statute law and its relations to the common law; formation and development of codes; literature of the law; origin and procedure of

courts of law and equity; nature and origin of legal rights; private rights; rights to persons and legal remedies for their violation; rights to property and legal remedies for their violation; public rights; rights of citizens against states as guaranteed and enforced by constitutional law; rights of states against citizens as illustrated and enforced by criminal law; national rights and duties; principles of international law.

Under the foregoing general heads the appropriate subordinate subjects will be considered in such detail as the period allotted to the course and the progress of the class will permit. Principal text-books: Robinson's Elementary Law; Cooley's Constitutional Law; Woolsey's International Law. In the select readings, the works of Sir Henry Maine receive special attention.

III. HISTORY

Professor WHEELER :—

- 17 *History of Europe since 1789*. [Seniors.] 2 hrs. both terms.

Mainly political; introductory to European politics of our day.

- 18 *English History*, general course. [Sen.] 3 hrs. both terms.

Political and constitutional. Particular attention is given to the origin and development of the system of self-government. The course is of special value to those who intend to study law.

- 19 *English History*, special course. [Sen.] 2 hrs. both terms.

Attention is confined chiefly to the Tudor and Stuart periods. Constitutional liberty vs. arbitrary power.

NOTE.—The loan library of History, founded by the liberality of about twenty graduates of the University, is for the use of students in the historical courses. It contains at present nearly 500 volumes, relating chiefly to the subjects of courses 17, 18, and 19. Other works which may be needed, will be added to the collection from time to time.

Professor DEXTER :—

- 20 *American History*. 2 hrs. 1st term.

Colonial history to 1765. Lodge's Short History of the English Colonies in America is used as a basis of instruction.

- 21 *American History*. 2 hrs. 2d term.

History of the United States from 1765 to 1865. A printed outline of topics to be taken up, with lists of authorities, is furnished to the students before each exercise, and they are required to prepare themselves on the topics indicated, by means of books reserved for their use in the Library or otherwise accessible to them.

Mr. BOURNE :—

- 23 *Mediaeval History.* 2 hrs. both terms.

This course is designed to give a general view of European history between the fourth and sixteenth centuries, tracing the development of the modern nations.

- 24 *History of the Reformation.* 1 hr. 2d term.

The political and religious changes of the period.

Courses 23 and 24 are conducted partly by recitations, partly by lectures.

IV. MODERN LANGUAGES

Assistant Professor RIPLEY :—

- 25 *Goethe.* 3 hrs. both terms.

During the first term selections from Goethe's shorter poems (lyrics, ballads, etc.) will be read. The poet's life down to the death of Schiller in 1805, will be studied, with the aid of selected readings, papers, and lectures. During the second term Faust Part I entire, and selections from Part II.

- 26 *German Prose.* [Seniors.] 2 hrs. both terms.

For rapid reading. Selections will be made from more difficult narrative prose, works of travel, historical and critical essays.

- 27 *German Composition.* 2 hrs. both terms.

A course devoted to written and oral work in German composition. Themes in German written and criticized; practice in reading German without translation.

Mr. GOODRICH :—

- 28 *German Novels, Stories, and Plays.*

[Juniors.] 3 hrs. both terms.

A course in rapid reading.

- 29 *German Drama.* 3 hrs. both terms.

Reading of selected plays from Lessing, Goethe, Schiller.

- 29a *Elementary (Freshman) German.* 3 hrs. both terms.

Professor KNAPP :—

- 30 *Spanish.* 3 hrs. both terms.

Essentials of Grammar. Rapid reading of modern authors (novels, drama), to lay basis for advanced practical course.

- 31 *Advanced Spanish.* 2 hrs. both terms.

Dramatists and Novelists of the seventeenth century. Advanced composition.

- 32 *Old French.* 2 hrs. both terms.
Earliest Monuments. Roman de Rou, part 1st. Choix de Fabliaux. Villon (les deux Testaments). Farce Pathelin.
- 33 *Modern French.* 3 hrs. both terms.
Composition and conversation.
- 34 [Sophomore French.] 2 hrs. both terms.
Figaro (newspaper) and Revue des Deux Mondes (first term); History of France and De Tocqueville's Ancien Régime et la Révolution (the two latter to be recited in substance, at 20 pages a lesson, with questions on French text).

Assistant Professor BENDELARI :—

- 35 *Classical French Authors.* 3 hrs. both terms.
Authors of the XVIIth century (Corneille, Racine, Molière, La Fontaine, Mme. de Sévigné, etc.); History of French Literature.
- 36 [Freshman French.] 3 hrs. both terms.
Easier authors of the XIXth century (G. Sand, Mérimée, About, etc.); Grammar and Composition.
- 37 *Elementary Italian.* 3 hrs. both terms.
Toscani's Grammar; Composition; De Amicis, Manzoni, Goldoni.

Mr. BRIDGMAN :—

- 38 *Modern Greek.* 2 hrs. 2d term.
Geldart's Guide to Modern Greek; reading of the current Greek literature; as much conversation as possible.

Professor BEERS :—

- 39 *Anglo-Saxon and English.* 2 hrs. both terms.
A two-years' course, Anglo-Saxon and Early English; Sweet's Anglo-Saxon Reader; Mätzner's *Altenglische Sprachproben*; Beowulf; Earle's History of Anglo-Saxon Literature; ten Brink's Early English Literature.
- 40 *English Literature.* [Seniors.] 3 hrs. both terms.
First term: Literature of the Elizabethan and Commonwealth periods. Readings in Spenser, Shakspeare, Bacon, Milton, and other authors. Lectures. Text-book; Morley's First Sketch of English Writers. Second term: Literature of the 19th century. Lectures and reading course. Text-book; Mrs. Oliphant's English Literature in the 19th century.

Mr. J. E. WHITNEY :—

41 *English Literature.* [Juniors.] 3 hrs. both terms.

Spenser's *Faerie Queene*, Books I and II. Dowden's *Shakspeare Primer*. Shakspeare's *Plays*. Milton's *Minor Poems* and *Paradise Lost*. The History of the Literature will be followed in a text-book and in Lectures. A course of outside reading will include extracts from Child's *English Ballads*, Spenser's *Minor Poems*, Marlowe, plays of Shakspeare not taken up in class room, Jonson, Donne, Herbert, Herrick, Cowley, Marvell, and others. Opportunities will be given for extra optional work.

41a *Chaucer.* 1 hr. both terms.
Canterbury Tales.

42 *English Language.* 1 hr. both terms.

Lounsbury's *History of the English Language*. Lectures. Studies of the language with Skeat's *Etymological Dictionary*. Opportunities will be given for extra optional work.

Mr. McLAUGHLIN :—

43 *English Literature.* 2 hrs. both terms.

Representative plays of the leading dramatists before 1640, including several plays of Shakspeare. Lectures on the rise and development of the English drama. Discussion of papers prepared by the class.

The portions of authors selected for reading in the various English courses are in no cases the same.

V. ANCIENT LANGUAGES AND LINGUISTICS

Professor HARPER :—

44 *Hebrew (first course).* 2 hrs. both terms.

Genesis i-viii, and with these chapters the principles of the Hebrew language; critical reading of selected chapters in the Pentateuch; rapid reading in Exodus and Deuteronomy; lectures on Hebrew poetry and Pentateuch-criticism.

45 *Hebrew (second course).* 2 hrs. both terms.

Selections from Isaiah, minor Prophets, Job, and Proverbs; advanced Hebrew grammar; Hebrew syntax; principles of Textual criticism.

46 *Hebrew and other Semitic Literature.* 2 hrs. both terms.

The books of the Old Testament, their literary character and historical contents; Assyrian, Arabic, Aramaic, and other Semitic literature, especially in relation to Hebrew literature.

47 *Arabic.* 2 hrs. both terms.

Arabic version of Genesis, chapters i-iv, and with these chapters the principles of the language (Lansing's Arabic Manual); selected portions of the Kuran; lectures on contents and arrangement of the Kuran.

48 *Assyrian.* 2 hrs. both terms.

Principles of the language; practice in reading the cuneiform text of Lyon's Assyrian Manual and Delitzsch's *Lesestücke*; lectures on Assyrian History and Literature.

Professor W. D. WHITNEY:—

49 *Sanskrit.* 4 hrs. both terms.

A first year's instruction in Sanskrit, beginning with the instructor's Sanskrit Grammar, and passing on to Lanman's Reader. A sketch of Sanskrit literature is given in connection with the exercises during the latter part of the year.

50 *Linguistics.* 1 hr. 2d term.

A series of exercises—mingled lecture, recitation, and discussion—on the leading topics of the general study of language, following and using as text-book the instructor's *Life and Growth of Language*, is given if a class of six or more is formed.

Professor PECK:—

51 *Pliny, Suetonius, and Tacitus.* 3 hrs. both terms.

Pliny's familiar letters; private antiquities and literary features of the age. Tacitus' Dialogue on the decline of Oratory; Latinity of the Silver age. Selections from Tacitus (*Annals*, i-vi) and Suetonius, illustrative of the character and reign of Tiberius.

52 *Latin Composition.* 2 hrs. both terms.

Written and oral translations from English into Latin; Latin themes and conversation.

53 *Horace and Persius.* 3 hrs. 1st term.

Interpretation of the Epistles (including the *Ars poetica*) of Horace; comparative studies in the Satires of Horace and Persius.

54 *Cicero.* 2 hrs. 2d term.

The *De Oratore* and the speech for Murena; Cicero's position in Roman literature and oratory.

55 *Latin Literature.* 1 hr. 2d term.

Lectures; studies in representative authors from Livius Andronicus to Aulus Gellius.

[This course is open only to those who shall have taken with credit at least one Latin elective in the first term.]

Professor H. P. WRIGHT :—

- 56 *Juvenal.* 2 hrs. 1st term.
Satires i, iii, iv, v, vii, viii, with study of the private life of the Romans.

Mr. ABBOTT :—

- 57 *Cicero's Letters.* 1 hr. 1st term.
Sketches of Roman politics and politicians during the two years after Caesar's assassination, gathered from the letters of Cicero for that period.
- 58 *Plautus and Terence.* 2 hrs. 2d term.
The *Aulularia* and *Pseudolus* of Plautus and the *Andria* of Terence.

Professor SEYMOUR :—

- 59 *Greek Tragedy.* 2 hrs. 1st term.
The *Medea* and *Hippolytus* of Euripides, with special reference to Greek metres and scenic antiquities.
- 62 *Demosthenes.* 2 hrs. 1st term.
The Oration on the Crown.
- 63 *Pindar.* 2 hrs. 2d term.
Selected odes, with a sketch of lyric poetry.
- 64 *Greek Tragedy.* 2 hrs. 2d term.
The *Agamemnon*, *Eumenides*, and *Persians* of Aeschylus.
- 65 *Thucydides.* 2 hrs. 2d term.
History of the Sicilian Expedition.
- 66 *Plato.* 3 hrs. 2d term.
The Republic.
- 67 *Greek Testament.* 1 hr. 2d term.
A philological, not theological, interpretation of St. Paul's Epistles to the Corinthians.

Mr. REYNOLDS :—

- 68 *Xenophon's Minor Writings.* 2 hrs. 1st term.
The *Oeconomicus*, *Symposium*, *On the Athenian State*—with discussion of private and public antiquities.
- 69 *Greek Composition.* 1 hr. 2d term.
A course designed especially for those who propose to teach.

Mr. BRIDGMAN :—

- 70 *Lucian.* 1 hr. 1st term.
The True History and one or two of the shorter Dialogues.

- 71 *Greek Comedy.* 1 hr. 2d term.
The Plutus of Aristophanes and the Cyclops of Euripides.

VI. NATURAL AND PHYSICAL SCIENCE

Professor LOOMIS :—

- 72 *Practical Astronomy.* [Seniors.] 4 hrs. 1st term.
Loomis's Practical Astronomy. Students have the free use of a portable transit instrument for observations.
- 73 *Meteorology.* [Seniors.] 2 hrs. 2d term.
Loomis's Meteorology. Daily study of the current weather maps of the signal service.

Professor J. D. DANA :—

- 74 *Geology.* [Seniors.] 2 hrs. 1st term.
Geology—physiographic, lithological, and historical.
- 75 *Geology.* [Seniors.] 2 hrs. 2d term.
Remainder of the historical Geology and dynamical Geology.
- 76 *Advanced Geology.* [Seniors.] 1 hr. both terms.
In connection with the study of the Manual, the reading and discussion of original memoirs and other publications treating of the topics in the course, together with work in the field. Excursions.

Professor EATON :—

- 77 *Botany.* [Juniors.] 2 hrs. 2d term.
The course is limited to twenty who pass the best examination in Gray's Lessons in Botany.
- 78 *Pteridology and Bryology.* [Seniors.] 2 hrs. 1st term.
The course is limited to six who do best in the botany of Junior year. The two hours constitute a single exercise weekly.

Professor A. W. WRIGHT :—

- 79 *Physics.* [Seniors.] 2 hrs. both terms.
Two exercises each week, chiefly practical work in the Sloane Physical Laboratory, with measurements, especially in heat, light, and electricity, each exercise occupying two hours. As introductory to the laboratory practice, the exercises, during a portion of the first term, consist of recitations or discussions upon the theory and methods of physical measurements, the use of instruments, and other special topics. Laboratory facilities are also accorded to students of the course at other times than those of the stated exercises. Kohlrausch's Physical Measurements; Glazebrook

and Shaw's Practical Physics ; Kempe's Handbook of Electrical Testing ; Everett's Units and Physical Constants, etc.

In case the number of applicants is greater than can be accommodated, preference will be given to those having a higher standing in Physics and Mathematics.

Professor THACHER :—

80 *Zoology*. [Juniors.] 4 hrs. 1st term.

Dissection of a small number of typical animals. Lectures on classification of animals. Lectures and recitations on Physiology. Huxley and Martin's Elementary Biology ; Huxley's Elementary Physiology.

Professor E. S. DANA :—

81 *Mineralogy and Crystallography*. 2 hrs. both terms.

Practical study of mineral species by means of blowpipe analysis and other methods ; mathematical study of crystals by the methods of analytical and spherical trigonometry, as also of their optical properties. The time will be divided about equally between the two parts of the subject ; the practical exercises may be prolonged to cover two hours when but little outside preparation is called for.

82 *Determinative Mineralogy*. 1 hr. 2d term.

Practical exercises in the determination of minerals. Supplementary to course 81 and limited to those taking that course, and to those who have some previous knowledge of Mineralogy.

83 *Crystallography*. 1 hr. 1st term.

Study of crystals, theoretical and practical ; more advanced and somewhat more difficult than that involved in course 81 and for which it may be substituted. This may be taken as a mathematical course by those not studying Mineralogy.

84 *Petrography*. [Seniors.] 1 hr. 2d term.

The study of rocks, chiefly by the microscope, involving also a preliminary study of the form and optical characters of the minerals common in crystallized rocks. The exercise may be extended over two hours. Limited to those taking course 81.

Professor GOOCH :—

85 *Chemistry*. [Seniors.] 3 hrs. both terms.

A special laboratory fee is charged in this course.

VII. MATHEMATICS

It is strongly recommended by all the instructors in the mathematical department that those who intend to study advanced mathematics or

the natural and physical sciences, or who expect to become engineers, should take course 86 in the Calculus in Junior year.

Professor NEWTON :—

- 86 *Calculus.* 3 hrs. both terms.
- 87 *Integral Calculus and Mechanics.* [Sen.] 3 hrs. both terms.
Mean values and probability; differential equations; analytical statics and dynamics.
- 88 *Shooting Stars and Meteors.* [Sen.] 1 hr. both terms.
The mathematical theories of these bodies and the treatment of the observations of them.

Professor GIBBS :—

- 89 *Vector Analysis.* [Seniors.] 2 hrs. 1st term.
Elementary course, in which the simpler problems of geometry, kinematics, and mechanics are treated by vector methods.
- 90 *Vector Analysis.* [Seniors.] 2 hrs. 2d term.
Advanced course, open only to those who have taken the preceding. The same methods are applied to electricity.
- 91 *Computation of Orbits.* [Seniors.] 1 hr. both terms.
Vector methods will be used, and the course is open only to those who take course 89.

Professor E. L. RICHARDS :—

- 92 *Higher Trigonometry.* 1 hr. both terms.
Exponential and logarithmic series; DeMoivre's theorem; theory of proportional parts; applications.

Professor PHILLIPS :—

- 93 *Analytical Geometry.* 2 hrs. both terms.
Casey's Treatise on Conic Sections is made the basis of instruction. The methods are extended to Geometry of three dimensions. Open only to those who take the Calculus.

Assistant Professor BEEBE :—

- 94 *Geodesy.* 2 hrs. 1st term.
Trigonometrical surveying; figure of the earth; problems in practical Astronomy; methods of the United States Coast Survey. Some time will be given to the use of the theodolite. Students who desire to do so can take in addition one or two hours per week in practice in the use of instruments.
- 95 *Descriptive Astronomy.* 2 hrs. 2d term.
Continuation of the required work of 1st term Junior year. Newcomb's Popular Astronomy; Clerke's History of Astronomy.
-

The following statements are added, to explain the general aim and scope of the instruction in various leading subjects of study.

GREEK—During the first two years, the student reads five or six books of Homer, dramas of Aeschylus, Sophocles, and Euripides, one or two comedies of Aristophanes, selections from the history of Herodotus, one or more orations of Demosthenes, Isocrates, or Lysias, the Apology or some dialogue of Plato; occasionally, the Symposium of Xenophon or selected dialogues of Lucian. These works are selected with a view to making the student familiar with the leading branches of Greek literature, and the most interesting phases of Greek life and thought. The most important grammatical principles are reviewed in Freshman year; in Sophomore year, grammatical questions are discussed rarely, except as they are necessary for the interpretation and illustration of the author's meaning. In reading the works of the poets, less attention is paid to linguistic and grammatical points than to their literary quality, to the structure of the poems, to poetic words, forms, arrangement of words, rhythm, and constructions; but the growth and development of the language are discussed as well as the development of the literature. In reading the orators and historians, the connection of thought and of events is made prominent. Greek prose composition is practised only so far as to aid the student in reading Greek authors, and to quicken his perception of nice distinctions in the order and choice of words and constructions.

In the optional courses of the Junior and Senior years, the student has the opportunity of reading the works of the lyric poets, other Greek dramas and other dialogues of Plato, parts of Aristotle (his Politics and Ethics), and the idyls of Theocritus; as well as of studying Greek inscriptions, and of doing more critical work on the Homeric poems than is suited to the first College year; and of learning the Modern Greek language. The history of Greek philosophy is studied. Students may also attend Professor Hoppin's fully illustrated lectures on Greek art, in the Art School.

LATIN is continued as a required study till the close of the Sophomore year, when it is intended that the student shall have gained clear conceptions of the genius of the language and its relations to other ancient and to modern tongues, a good knowledge of the characteristics of Latin literature and the essential facts of Roman history, and some appreciation of the position of Rome in the history of civilization. That subsequent reading of the language may be more easy and more exact, due attention is given in the early part of the course to forms, constructions, and idioms. From term to term the study of the literature is made more prominent, and the particular texts are treated as means for the study of the public and private life of the Romans. Instruction

is given mainly by recitations, but such work is supplemented by occasional lectures by the instructors and by conferences on papers presented by the pupils. In connection with the minute study of the authors, considerable time is given to oral and written reading at sight, and to composition in Latin.

For Juniors and Seniors who desire to continue their Latin studies parallel courses are offered by different instructors, with different ends in view and by different methods. The characteristic of a course may be, *e.g.*, literature, or history, or philology, or antiquities, or the speaking and writing of Latin, and the methods of preparation and the class-room treatment vary accordingly. Topics suggested by the nature of the courses, or by individual tastes and intentions, are assigned to students, and papers thus prepared are discussed before the class. Lectures and the rapid reading of large amounts of text are more frequent than in the prescribed courses. The connection of Latin with English is emphasized, and written translations are from time to time required and criticised with reference both to their faithful reproduction of the Latin thought and their idiomatic English. German annotated editions are often used, not only for their intrinsic helpfulness, but also to encourage the practical use of that language. Students who give evidence of unusual capacity and attainments may be admitted to membership of graduate classes.

MATHEMATICS—In Geometry the exercises consist in recitations from the text-book, the original demonstration of theorems, and applications of the principles to the solution of numerical problems.

After the student has gained facility in the use of trigonometrical tables, the principles of Plane Trigonometry are applied to the problems of Mensuration, Surveying, and Navigation, and those of Spherical Trigonometry to the elementary problems relating to the celestial sphere.

In Algebra the elementary principles of the theory of equations are illustrated graphically, and the student is exercised in the numerical solution of equations of the higher degrees and the graphical representation of the relations of quantities.

In Analytical Geometry the student is carried through the elementary properties of the lines and surfaces of the second degree, and is introduced to the theory of map projection.

These are studies of the Freshman and Sophomore years, and together with the elements of Astronomy which are pursued in Junior year, are regarded as essential parts of a liberal education.

In the Junior and Senior years opportunity is given in the elective courses to obtain a wider knowledge of Analytical Geometry and Trigonometry with their applications to Geodesy and Astronomy. A longer and shorter course are provided in Junior year in Differential and Integral Calculus. The shorter course is designed for students who desire to become acquainted with the methods of the Calculus but

whose principal studies are not of a mathematical character. The longer course is designed for such as expect to make a serious study of any department of pure or applied mathematics.

In Senior year advanced subjects in the Calculus and the elements of Analytical Mechanics form one line of study.

An elementary and an advanced course are provided in what is called Vector Analysis. The object of these courses is to introduce the student to the methods of multiple algebra in geometry, mechanics, and physics. The matter taught is not entirely unlike that usually given in courses in Quaternions, but the method followed is in some respects nearer to Grassmann's than to Hamilton's. The elementary course is confined to the simplest algebraic relations of vectors. The advanced course includes differentiation with respect to position in space, and the theory of linear vector functions.

Students who show special aptitudes are exercised in the working up of subjects which require the use of the library and more prolonged investigation than the daily exercises of the class-room. Such work begins in Freshman year. There is a considerable collection of models, which are used to assist the imagination in the various branches of study.

ENGLISH—Two terms of English are prescribed in Sophomore year. The first deals with prose style as illustrated by selected essays of Addison, Steele, Burke, Lamb, DeQuincey, Macaulay, Carlyle and Ruskin; this work is associated with rhetorical praxis. The second term is devoted to five plays of Shakspeare: the study is literary, rather than philological or antiquarian. Lectures are given in dramatic criticism, a paper on some subject connected with the plays is prepared and read by each member of the class, and informal discussion of these papers is encouraged.

A course in Elizabethan literature with three exercises a week is given through Junior year. The central line of work to which chief attention is paid includes the lives of Spenser, Shakspeare, and Milton, the first two books of the Faery Queene, six or eight of the most important of Shakspeare's plays, Milton's minor poems, selections from his prose, and the whole of Paradise Lost. Church's Life of Spenser, Kitchin's edition of the Faery Queene, Books I and II, Dowden's Shakspeare Primer, editions of separate plays of Shakspeare by Rolfe and in the Clarendon Press series, and Masson's edition of Milton's Poems, will be used as a basis for the work this year. Lectures are given on the literary history and various subjects connected with the course. Supplementary readings are required in Child's English Ballads, Skelton, Spenser, Marlowe, Shakspeare, Jonson, Donne, Cowley, Herrick, Herbert, Milton, Marvell, and others.

A course in Chaucer with one exercise per week is open to Juniors and Seniors. Morris's edition of The Prologue, etc., Skeat's edition of the Prioresses Tale, etc., in the Clarendon Press Series, and Louns-

bury's edition of the *Parlament of Foules*, and an edition of the *Canterbury Tales*, will probably be used this year. Lectures are given on the literary history of the period, the manners and customs of the times, and other subjects illustrative of the work. Supplementary readings are required in Child's *English Ballads*, *Mandeville*, and others.

A two-hours' elective is also offered to the Junior and Senior classes in the leading dramatists from 1587 to 1640. Lectures are given on the origin and earlier development of English dramatic literature, on the actors, theatres and various stage-details of the Shaksperian period, and on the literary characteristics of the authors read. In the recitation work special attention is directed to dramatic analysis.

In the first term of Senior year the critical reading of Shakspeare in the class-room is continued. The plays selected for 1887-88 are *Twelfth Night*, *The Winter's Tale*, *Measure for Measure*, and *King John*. The literature of the period from 1780 to 1830 is studied in Oliphant's *Literary History of England*. A course of weekly lectures is given embracing the following authors: Cowper, Burns, Wordsworth, Coleridge, Landor, DeQuincey, Scott, Byron, Shelley, and Keats. Outside reading in the writings of all of these is assigned and an examination in this reading is held at the close of the term.

In the second term of Senior year lectures are given on Tennyson, Browning, Carlyle, Thackeray, George Eliot, Ruskin, the Oxford Movement, the Broad Church, the Rugby Group, the Pre-Raphaelites, etc., and outside reading is assigned in the writings of Tennyson, Browning, Carlyle, Thackeray, George Eliot, Ruskin, Matthew Arnold, Clough, Rossetti, and Swinburne. The literature of the 18th Century is studied in Perry's *History of English Literature in the Eighteenth Century*: in Saintsbury's *History of Elizabethan Literature*: in lectures on the periods covered by those text books: in the critical reading in the class-room of selected portions of the writings of Shakspeare, Bacon, Milton, Browne, and Dryden; and in outside supplementary reading, for examination, in the works of Donne, Herbert, Marvell, Herrick, and Pope.

A special library of from twenty to thirty duplicate copies of the most useful editions of many writers has been established for supplementary readings. This library will be enlarged from time to time.

A course of one hour a week through the Junior year is offered to those who wish an acquaintance with the history of the English language. After finishing a text-book, the English vocabulary is studied in specimens of the speech of different periods and in groups of words introduced from various languages, showing thus the condition and changes of the vocabulary at different times, its composite nature, and the relative value of the contributions from other languages. Lounsbury's *History of the English Language* and Skeat's *Etymological Dictionary* are used in the course the present year.

English composition is prescribed through the whole of the Sophomore and Junior years. In the former, during the first term compositions are written as weekly class-room exercises; sketches, descriptions, brief narratives and the lighter forms of the essay are preferred to pieces on more difficult or bookish themes. During the rest of the year five essays of a more elaborate character are written; and in the Junior year two essays in each term. Each student's work is criticised at least once during every term; in cases where special instruction is needed, as well as in all cases where it is desired by the writer, each composition is discussed in private interviews. Literary practice is also encouraged by three public exhibitions during the course; two at the end of the Senior year, the third about the middle of the Junior year. Those competing for the last receive special instruction whenever they desire it.

GERMAN—The student may pursue the study of German during each of the four years of his College course, if he so elect. While the study may be begun at the opening of any of the four years, it is strongly urged that the elementary work be done as early in the College course as possible, in case the student proposes to take up the language at all.

The courses of work for the successive years may be outlined as follows. During the first year the work consists of German grammar, translation of easy English phrases, sentences, and stories into German, and of easy German prose into English. Constant sight-translation is used as a means for developing and strengthening the student's vocabulary and for freeing him from dependence upon the lexicon and from the word-by-word methods which its use encourages. Especial care also is devoted to pronunciation. The work of the second year continues and extends that of the first year, taking up the translation of German prose, narrative, critical, and historical, composition and sight-translation. Throughout the two years the aim in reading German is to cover as much ground as possible—from 500 pages upwards—in the belief that thereby the student will acquire more command of the language than when a smaller amount is read with rigid attention to grammatical details. It is expected that at the end of the second year the student will be able to use the language in his work in other branches of study. Those, therefore, who are studying German solely with this end in view may perhaps abandon the language at this point; but no student should begin the language unless he expects to devote at least two years to its study.

For the remaining years the elective courses vary from year to year; but opportunity is given for the critical study of some of the masterpieces of German literature and for the study of periods in its history. Those who so elect may also have opportunity to take up the earlier German literature and to study the historic development of the grammar of the language. In this latter course all work will be done in German.

German readings are given by the instructors outside the regular College work, and advanced classes in composition formed, where German alone is spoken. German is constantly read aloud in the class-room, and all efforts, both in the class-room and in private, are made to improve the student's pronunciation and to help him to acquire some facility in expressing his ideas in German. But it is not a leading aim in the instruction in German to enable the student to converse in that language. Training in the ordinary conversational idiom may be had more profitably elsewhere and cannot form any considerable part of the class-room work. The student may acquire the language as a tool for use in other departments of study and may come in contact with the best works of German literature, studying their form and contents, and the lives and environment of their authors; fluency in conversation must be acquired where the conditions are more fitted to the object which they are to effect.

FRENCH—This course may extend through the entire four years, involving the study of the leading epochs of the language and literature from their inception to the present; embracing especially, with reference to English origins, the *Norman* dialect of the Old French as exhibited in the *Chanson de Roland*, the *Roman de Rou*, and the *Fabliaux* of Marie de France; in the XV. and XVI. centuries the works of Villon, Marot, Rabelais, and Montaigne, as representatives; the drama from the earliest *Mystères*, *Farces*, *Soties*, to Garnier, Corneille, Molière, and Racine; in satire and criticism, Boileau; dwelling particularly on the foreign and national influences that moulded the language till it assumed its actual form. Attention throughout the earlier years is given to composition in French as the best method for training the attention, the memory and the judgment, and the oral use of the language is insisted on for the courses in the Classical and Old French periods. Instruction is given by recitation, and lectures in French will be read on the history of the language and literature, on which written French examinations will be required.

PHYSICS—The required course in Physics extends through the year with three exercises weekly. The general design of the course is to make the student acquainted with the fundamental principles of the science, to enable him to understand something of the methods of experiment and reasoning by which physical laws have been established, and to give him an insight into the degree of accuracy demanded in physical work. The subject of Electricity is treated at somewhat greater length than the other branches, and is fully illustrated by experimental lectures; in this direction the recent equipment of the Sloane Laboratory makes the department especially strong. During the Senior year there is an opportunity for those students desiring to avail themselves of it, to go forward with practical laboratory work, as is described in the list of elective courses (No. 79).

CHEMISTRY—Pending the completion of the new Kent Laboratory, an elective course of three exercises weekly represents the work done in Chemistry by undergraduates during the present year. The instruction of the first term is given in the class-room, but that of the second term will be largely practical, and in the laboratory.

It is probable that during the academic year 1888-89 a course of experimental lectures may be given to the Junior class, and an elective course of practical work in the laboratory, extending through both terms, will be offered to Seniors and Juniors.

POLITICAL SCIENCE AND LAW—The instruction in the elements of Political Economy is intended to give familiarity with the method and doctrines of the so-called "orthodox" economists, as the proper introduction which the student should have to the science, and as the basis for whatever may be offered later. Text-books are used with set lessons, constant examinations, both written and oral, discussions, and illustrations. The courses are arranged in the belief that the student will gain more under a classification which is adjusted to meet differences of interest and capacity. Those who take Political Economy in Junior year have an opportunity in Senior year to become acquainted with the history of the science and the controversies now going on in it, and to study more thoroughly special topics. In the course on Anthropology they are also offered an opportunity to become acquainted with the new sciences whose investigations are so important for the whole field of social science.

The course in law treats of municipal and international law as parts of a liberal education. The object is to study civil institutions, both in their theory and in their positive form. The instruction is elementary, dealing with the fundamental facts and principles which underlie the civil polity of the American State and is intended to give the student a correct knowledge of such essential facts about the life of the State and its accepted doctrines, as every educated man should possess, as well as to lead up to the professional study of law.

MENTAL AND MORAL SCIENCE, AND PHILOSOPHY—The courses in this branch of study begin in Junior year, and continue until graduation. During two-thirds of Junior year and the whole of Senior year, three hours per week of class-room work in Logic, Psychology, Ethics, and the Evidences of Religion, are required of every student; the remainder of the work in these and kindred subjects is elective.

LOGIC—In this subject there is an elementary required course, occupying three hours a week during the first term of Junior year. In this course attention is centered on the principles of correct definition and valid proof. A large part of the work of the students consists in the oral and written discussion of examples of definition and of deductive

and inductive argument, the examples being partly in the condensed form usual in text-books on Logic, partly in the form of somewhat extended quotations from various authors on subjects of general interest. At the same time, and although the minutiae of the traditional Logic are ignored, pains is taken to secure the disciplinary value of the study as a training in abstract thinking and abstract statement.

PSYCHOLOGY—Required work in this subject begins with the last half of the second term of Junior year and continues nearly through the first term of Senior year,—the course thus comprising about twenty weeks of instruction in all. Although the earlier part of the course is taught with constant use of a text-book, upon which daily recitations are exacted, considerable time from the first is taken by the teacher in oral instruction, critical or supplementary of the text. One or more formal lectures on selected topics in Psychology are given each week. During the later part of the course, after the pupils have acquired some facility in the general subject, the instruction is chiefly by lectures upon the basis of a text-book. The course is completed by lectures discussing the doctrine of the Mind's nature, and its relation to the body. The course in Physiological Psychology extends through the entire year and is taught by lectures and recitations; it is illustrated by constant use of models, charts, apparatus for mixing color-sensations, etc. It is designed to go briefly over the whole ground of the modern experimental and physiological study of mental phenomena; especially as regards reflex and automatic cerebral action, the localizing of cerebral function, the quality and quantity of sensation, psychometry, and the physical basis of the higher faculties. It may be elected either in Junior year as preparatory, or in Senior year as supplementary, to the required course in introspective Psychology.

HISTORY OF PHILOSOPHY—The study of this subject is elective and confined to Senior year. In the study of the History of Greek Philosophy the principal emphasis is laid upon Plato and Aristotle, and upon the post-Aristotelian Schools, as illustrating the permanent and most interesting problems of Philosophy.

The course in Modern Philosophy extends through the whole of the Senior year. It is taught both by recitations from the text-book, with accompanying remarks from the teacher, and by lectures. Effort is made to secure from each pupil the careful reading of at least one work of some prominent philosopher of the period considered in the classroom. Special emphasis is laid upon the philosophy of Kant; and a course of lectures, lasting several weeks, is delivered in exposition of selected extracts from his Critique of Pure Reason. Pains is taken to trace the development of modern speculative thought so as to throw light upon the principal questions in debate among present writers in philosophy.

PHILOSOPHY—In addition to the study of Philosophy as connected with the problems of rational Psychology, and as illustrated and enforced by the history of the development of Philosophy, the works of one or more of the leading authors are read and discussed, with such students as take the elective courses opened for this purpose. In this way the more general studies in Metaphysics and Ethics are supplemented by special information regarding selected subjects and writers.

MORAL SCIENCE, as a study, is intimately connected with the instruction in Psychology and Philosophy, as its foundations are discovered in the constitution of the human soul, and its method and fundamental relations are justified and enforced by those principles which are essential to all scientific thinking. In the department of Moral Science and of Practical Ethics, a somewhat thorough course is required of the entire Senior class, as an essential element of a thorough education and an important condition for practical usefulness. This general course is supplemented by special classes in scientific and practical Ethics, and particularly in the history and criticism of ethical theories, which are maintained through the year. In connection with these courses, a full course of lectures is delivered upon the nature, evidences and authority of Christian Theism and the Christian History, particularly as related to a sound ethical theory of man and his destiny. This course of lectures is attended by all the members of the Senior class, and a thorough examination enforced.

SPECIAL HONORS

Special Honors are conferred at the end of Senior year.

One-year honors may be taken in any one of the following groups of studies; two-year honors in any one of groups 2, 4-7 :

(1). Philosophy. (2). Political Science, History, and Law. (3). English. (4). Ancient Languages. (5). Modern Languages (exclusive of English). (6). Natural and Physical Science. (7). Mathematics.

A candidate for a one-year honor must announce his intention to the Dean on or before December 1 of Senior year; a candidate for a two-year honor to the same by the same date of Junior year.

A candidate for a one-year honor must pursue with distinction in his Senior* year, and a candidate for a two-

* But in group 3, work done in Junior year in English will be accepted in place of an equivalent amount of work done in Senior year.

year honor in his Junior and Senior years, courses (whether prescribed or elective) amounting to an average of at least six hours per week in one of the specified groups. For a two-year honor the work must be so distributed that an average of at least four hours per week shall be taken in Junior year.

A candidate for either honor must present a meritorious thesis before May 1, of his Senior year.

[In the department of Modern Languages, elementary German will not be reckoned for honors. In the department of Mathematics, no student will be considered a candidate for honors, unless he has taken the Calculus.]

TERMS AND VACATIONS

THE PUBLIC COMMENCEMENT is held on the last Wednesday in June. The first term begins twelve weeks from the day after Commencement-day and continues thirteen weeks; the second term begins on the first Thursday in January and continues until Commencement-day, with a Spring Recess—of eight days—including Easter. (See Calendar, p. 6.) There is also a recess at Thanksgiving, usually extending from Wednesday afternoon to Monday forenoon. The exercises of each term begin with prayers in the Chapel on Thursday morning.

PUBLIC WORSHIP

PRAYERS are attended in the Battell Chapel, with reading of the Scriptures and singing, every week-day morning, at 8.10 a. m., at which service the attendance of the students is required.

PUBLIC WORSHIP is held in the Chapel on Sundays, at which all the students are required to attend, except such as have special permission to attend the worship of other denominations, to which their parents belong. Such permission can be obtained only on presenting to the Dean a written request therefor from the parent or guardian.

DWIGHT HALL, a building erected on the College square, at the expense of Elbert B. Monroe, Esq., of Southport, Conn., and presented to the Corporation in 1886, is designed to furnish an attractive center for the religious life of the students of all the Departments, especially through the organized work of the Young Men's Christian Association of Yale University.

LIBRARIES AND READING ROOMS

The Library of the University, containing over 135,000 volumes, is open every week-day to all the students for consultation and for the drawing of books; in a separate part of the building is the Linonian and Brothers Library, a collection of nearly 30,000 volumes in general literature, specially selected for the use of the undergraduate students.

The College Reading Room, containing the principal newspapers and periodicals, American and foreign, is open to the students every day and evening without charge. There is also a reading room and a select library (partly for circulation and partly for reference) in Dwight Hall.

THE GYMNASIUM

THE GYMNASIUM is designed to provide all the students with opportunities for exercise, under the advice of a Medical Director, who is a regularly educated physician. Members of the Freshman Class are required, during a part of the year, to take exercise in light gymnastics under the instruction of the Medical Director; and any student may enter the class of general gymnastics, which is under the Medical Director's immediate care. A thorough physical examination and measurement of each student is made yearly by the Medical Director, and a record of these results is kept as a basis of advice as to exercise and regimen; an examination of this record shows that the standard of health of the average student improves during his College course.

Members of the other Departments of the University

may avail themselves of the privileges of the Gymnasium (including the advice of the Medical Director, the use of the apparatus, bowling alleys, and shower-baths), on the payment to the janitor, in advance, of a small fee.

EXPENSES

THE TREASURER'S BILLS are made out and delivered to the students three times a year, viz: at the close of the first term, and at the middle and at the close of the second term, at which times they are payable. The bills must be paid within two weeks after the beginning of the succeeding term or half-term, or interest is charged from the date of the bills, and the student is liable to be prohibited from reciting. Drafts on Boston, New York, and Philadelphia will be received at par.

The annual charge for tuition is one hundred and fifty dollars, including incidentals. An additional charge of eighteen dollars is made to each student in the last bill of the Senior year, to cover the expenses of graduation.

ABSENCE ON LEAVE—A student who is absent from College on account of sickness, or for any other cause, and retains his place in his class, pays full tuition during such absence; such payment is required before the student can be admitted to examination.

BOARD is obtained at prices varying from three and a half to seven dollars a week. The average price is about five dollars.

ROOMS—There are in the College buildings nearly two hundred and fifty rooms occupied by students, at prices varying (according to location) from fifty cents to six dollars per week. These rooms are not furnished, and the rates charged do not include heat or light.

FARNAM HALL (built in 1869-70) is named in commemoration of Henry Farnam, Esq., of New Haven, who bore the chief part of the expense of its erection; DUFEE HALL (built in 1870-71) commemorates in like manner the generosity of Mr. Bradford M. C. Durfee, of Fall River,

Mass.; Lawrance Hall (built in 1885-86) owes its name to a gift for this purpose from Mrs. Francis C. Lawrance, of New York City, in memory of her son, Thomas Garner Lawrance, of the Class of 1884, who died during his Senior year in College.

Students living out of College are not allowed to room in any building in which a family does not reside, except by special permission of the Faculty.

The rooms on the fourth floors of North College and North Middle College (rented at prices ranging from \$1 to \$1.50 per week), and a few others in Durfee, Farnam, and Lawrance Halls (at higher prices), are reserved each year for members of the Freshman Class; these rooms are all heated by steam, for which an additional charge of from \$25 to \$30 per year is made.

Applications for rooms from those who expect to enter the Freshman Class in this College in September, 1888, should be sent to Professor Henry P. Wright (the locating officer), not later than June 1. As no single rooms are reserved, every application should be signed by two persons who wish to occupy a room together.

Members of the Junior, Sophomore, and Freshman Classes, occupying any of the College rooms (except those on the fourth floors of North College and North Middle College) may retain the same rooms for another academic year, by making application in writing to the locating officer, on or before Saturday, May 26, 1888. Rooms not reserved will then be offered to the three Classes in order: choices will be allotted to the Junior Class on Tuesday, May 29, to the Sophomore Class on Thursday, May 31, and to the Freshman Class on Tuesday, June 5.

PRICES PER WEEK OF ROOMS IN COLLEGE FOR 1888.

When a room is occupied by two persons, each occupant will be charged with one-half the price named in this schedule. *Where a single person occupies alone a room having two bedrooms, each of which is directly lighted by an outside window, he will be charged ten per cent. in addition to the price set upon the room.*

- \$0.50.—66, 67, 82 North Middle; 188, 189 Old Chapel.
 \$0.75.—2, 3, 18, South; 49 South Middle; 65, 68, 81, 84 North Middle;
 98, 99, 114 North.
 \$1.00.—1, 4, 17, 20 South; 34, 47, 50, 63 South Middle; 79, 95, North
 Middle; 97, 100, 113, 116 North; 190, 191 Old Chapel.
 \$1.25.—15, 31 South; 39, 43, 46, 55, 59, 62 South Middle; 71, 75, 78, 87,
 91, 94, North Middle.
 \$1.50.—7, 11, 14, 23, 27, 30 South; 38, 42, 48, 54, 64 South Middle; 74,
 77, 80, 90, 93, 96 North Middle; 103, 106, 107, 110, 111, 119,
 122, 123, 126, 127 North.
 \$1.75.—6, 10, 13, 16, 22, 26, 29, 32 South; 40, 44, 45, 56, 60, 61 South
 Middle; 72, 76, 88, 92 North Middle; 133, 137, 141, 160, 167,
 175 Farnam.
 \$2.00.—8, 9, 12, 24, 25, 28 South; 37, 41, 53, 57 South Middle; 69, 73,
 85 North Middle; 101, 104, 105, 108, 109, 112, 120, 124, 125, 128
 North; 155 Farnam; 186, 187, 192, 193 Old Chapel.
 \$2.50.—182, 183 Lyceum; 243, 244 Lawrance.
 \$3.00.—180 Lyceum; 250, 251, 260, 261, 270, 271, 281 Lawrance.
 \$3.50.—142, 143, 158, 159, 161, 162, 176, 177 Farnam.
 \$4.00.—130, 131, 134, 135, 138, 139, 140, 144, 145, 146, 147, 148, 149, 151,
 152, 154, 156, 157, 164, 165, 168, 169, 172, 173, 174 Farnam;
 282 Lawrance.
 \$4.50.—129, 132, 163, 166, 170 Farnam; 208, 215, 216, 223, 224, 231, 232,
 239 Durfee; 248, 249, 258, 259, 268, 269, 279 Lawrance.
 \$5.00.—178, 179 Lyceum; 202, 204, 206, 209, 210, 211, 212, 214, 217, 218,
 219, 220, 221, 222, 225, 226, 227, 228, 229, 230, 233, 235, 237
 Durfee; 241, 242, 245, 246, 247, 252, 253, 254, 255, 256, 257, 262,
 263, 264, 265, 266, 272, 273, 274, 277 Lawrance.
 \$5.50.—280 Lawrance.
 \$6.00.—201, 203, 234, 238 Durfee; 278 Lawrance.

The subjoined table gives near estimates of the ordinary annual expenses in College, omitting clothing and vacation charges.

	Lowest.	General Average.	Very Liberal.
Treasurer's bill (tuition and incidentals),	\$150	\$150	\$150
Rent and care of half-room in College,	15	75	110
Board, 37 weeks,	130	200	270
Furniture, average of half-room for 4 years,	8	20	50
Fuel (steam-heat) and light, for half-room,	14	18	25
Washing,	15	27	45
Text-books and stationery,	10	30	50
Subscriptions (to Societies, Sports, Periodicals, etc.),		30	100
Private servant, for special care of room,			25
Sundries,	8	75	200
Total,	\$350	\$625	\$1025

BENEFICIARY AID

The sum of \$11,000 and upwards, derived partly from permanent charitable funds, is annually applied by the Corporation for the relief of students who need pecuniary aid, especially of those preparing for the Christian ministry. In this amount are included the income of the LANGDON FUND, of four thousand dollars, bequeathed in 1835 by Solomon Langdon, of Farmington, Conn., and a portion of the income of the ELLSWORTH FUND, now over fifty-six thousand dollars, received since 1858 from the estate of the Hon. Henry L. Ellsworth (Yale College 1810); both these funds are used for the support of students intending to enter the ministry.

There is also a LOAN FUND, for the benefit of needy students, which has been constituted from repayments made to the Treasury by former students who have received aid during the College course. No deserving student who will make good use of the opportunities of the College need be deterred from entering it by the cost of tuition. Those needing aid should apply to the President before November 1st in each College year. Assistance will be withdrawn from students who incur serious College censure, or who fail to maintain a reputable scholarship.

THE MORGAN FUND, bequeathed by the late Henry T. Morgan, of New York City, has been set apart by the Corporation, with the provision that the income shall be divided into scholarships (at present thirty-six in number, yielding \$125 each), to be assigned by the Faculty for the benefit of indigent and deserving students.

THE HARMER FOUNDATION OF SCHOLARSHIPS, the proceeds of a bequest in 1854 from Thomas Harmer Johns (Yale College 1818), of Canandaigua, N. Y., comprises six scholarships, each yielding one hundred dollars a year, to be given to deserving students of small means.

THE LYON SCHOLARSHIP FUND, of forty-four hundred dollars, given in 1869-72 by Mr. Morris W. Lyon (Yale College 1846), of New York City, benefits four scholars, selected for their worth and need by the founder or the Faculty.

THE LUCIUS HOTCHKISS FUND, of ten thousand dollars, the bequest of Lucius Hotchkiss, Esq., of New Haven, in 1881, comprises four scholarships, the income of which is given to indigent and deserving students.

THE LEAVENWORTH SCHOLARSHIP FUND, now amounting to over eight thousand dollars, was established in 1882 by the Hon. Elias W. Leavenworth (Yale College 1824), of Syracuse, N. Y., with the primary object of defraying in part the expenses of the education of students of good character and promise, bearing the surname of Leavenworth.

There are nineteen other Scholarship Funds, most of them of one thousand dollars, the income of which may be given to such students as shall be selected by the founders or the Faculty. In this number are included Scholarships named in commemoration of William Allen, Charles Atwater, William S. Charnley, William E. Dodge, Thomas H. and Luther Fuller, Sereno Gaylord, Samuel Holmes, Elisha C. Jones, William A. Macy, John S. Mitchell, Peter Parker, Messrs. Raymond and Bordwell, and John Spaulding.

There are also opportunities for students in need of aid to render service to the College as monitors, etc.; in this way about seven hundred dollars is disbursed annually. And in general it may be said that the other means of self-help at the command of students are sufficient to enable many of those who have spare time to provide for the larger part of their College expenses.

By the liberality of Mr. William L. Andrews, of New York City, and as a memorial of his son, Loring W. Andrews, a member of the class of 1883, a well furnished library has been established, containing text-books and works of reference, to be loaned gratuitously to those students who have need to avoid the expense of purchasing such books. Permission to use this library can be obtained from the President.

FELLOWSHIPS AND SCHOLARSHIPS

THE DOUGLAS FELLOWSHIP, with an income of six hundred dollars a year, was founded in 1873, by Mrs. Samuel Miller, of New Haven, and named in memory of her brothers, the Rev. Sutherland Douglas (Y. C. 1822) and George H. Douglas (Y. C. 1828). The incumbent, who must be a recent graduate of this Department, pursuing non-professional studies in New Haven, is elected annually, but no person shall hold the Fellowship for more than three years.

THE SOLDIERS' MEMORIAL FELLOWSHIP, with an annual income of six hundred dollars, was founded in 1875 by Mrs. Theodosia D. Wheeler, of New Haven, in honor of the alumni who fell in battle as Union soldiers, in the war of 1861-1865, and in special remembrance of William Wheeler, of the Class of 1855. The incumbent must be, at the time of his election, a graduate of this Department, of not more than three years' standing. He shall pursue non-professional studies, and may hold the Fellowship for a period not exceeding five years. In selecting the incumbent, the President and Professors are to give preference to one who has shown special proficiency in Greek; and for the further prosecution of Greek study, the Fellow may be allowed to spend a part or the whole of the time of his incumbency in Athens, in connection with the American School of Classical Studies, instead of in New Haven.

THE SILLIMAN FELLOWSHIP, founded in memory of Professor Benjamin Silliman, Professor of Chemistry, Mineralogy, and Geology in Yale College from 1802 until his death in 1864, has an annual income of six hundred dollars, and is awarded to a graduate of this Department who has given evidence of proficiency and promise in some branch of physical science. The incumbent is elected annually, but no person shall hold the Fellowship for more than three years.

THE BERKELEY SCHOLARSHIP, founded in 1733 by the Rev. George Berkeley, Dean of Derry, and afterwards Bishop

of Cloyne, and yielding about fifty-five dollars a year, is awarded to the student in each Senior Class who passes the best examination (which must be a creditable one) in the Greek Testament (Pauline Epistles), the first book of Thucydides, the first six books of Homer's Iliad, Cicero's Tusculan Questions, Tacitus (except the Annals), and Horace; provided he remain in New Haven as a graduate, one, two, or three years.

THE CLARK SCHOLARSHIP, being the income of a fund of two thousand dollars, given for this purpose by Mr. Sheldon Clark, of Oxford, Connecticut, is awarded in each Senior Class to the applicant who has attained the highest rank in the studies of the course; provided he remain in New Haven one year or two years immediately after graduation, pursuing a course of study (not professional) under the direction of the Faculty.

THE BRISTED SCHOLARSHIP, founded in 1848 by Mr. Charles Astor Bristed (Yale College 1839), of New York City, and yielding about one hundred and twenty-five dollars a year, is awarded, whenever there is a vacancy, to the student in the Sophomore or Junior Class who passes the best examination in the classics and mathematics. The successful candidate receives the annuity (forfeiting one-third in case of non-residence) until the end of the third year after graduation.

THE FOOTE SCHOLARSHIPS, founded in 1873 by a bequest of Harry W. Foote (Yale College 1866), of New Haven, and yielding five hundred dollars a year, are awarded to graduates of this Department, selected by the Corporation, who remain in New Haven for one or more years pursuing studies in the graduate courses of the Department of Philosophy and the Arts.

THE LARNED SCHOLARSHIP, founded in 1877 by the bequest of Mrs. Irene Larned, of New Haven, and yielding three hundred dollars a year, and tenable for three years, is awarded in each Senior Class. The incumbent must reside in New Haven, pursuing a course of advanced study under the direction of the Faculty.

THE MACY SCHOLARSHIP, being the income of a fund of ten thousand dollars, derived from a bequest of the Rev. William A. Macy (Yale College 1844), of Shanghai, China, who died in 1859, is awarded, whenever there may be a vacancy, to a recent graduate of distinguished scholarship, who may hold it for a term of three years. He shall reside in New Haven, pursuing a course of non-professional study, and shall at the close of each College year present a meritorious thesis in evidence of his work during the previous year.

THE WOOLSEY SCHOLARSHIPS, being the income of a fund of four thousand dollars, the gift of President Woolsey, in 1846-48, are awarded in successive years, one to the student in each Freshman Class, who passes the best examination in Latin Composition (excellence in which is essential to success), in the Greek of the year, and in the solution of algebraic problems. The successful candidate receives the annuity, under certain conditions, during the four years of his College course. The student who stands second at this examination receives for one year the income of the HURLBUT SCHOLARSHIP FUND, of one thousand dollars (established by Henry A. Hurlbut, Esq., of New York City, in 1859); and the student who stands third, the income for one year of the THIRD FRESHMAN SCHOLARSHIP FUND, of the same amount, given by Charles M. Runk, Esq., of Allentown, Pa., in 1865.

THE W. W. DEFOREST SCHOLARSHIP, being the income of a fund of two thousand dollars, bequeathed in 1867 by William Wheeler DeForest, of New York City, is awarded to a student in each Senior Class who has attained distinction in the study of French while in College, provided he pursue for the year after graduation a further course of study in the modern languages, especially French, Spanish, Portuguese, or Italian, under the direction of the Faculty.

PREMIUMS

THE DEFOREST PRIZE, founded by David C. DeForest, of New Haven, and consisting of a gold medal, of the value of \$100, is awarded "to that scholar of the Senior Class

who shall write and pronounce an English Oration in the best manner," the President and Professors being judges.

TOWNSEND PREMIUMS, five in number, of twelve dollars each, founded in 1843 by the gift of Isaac H. Townsend (Yale College 1822), of New Haven, are awarded in each Senior Class for the best specimens of English Composition; all compositions receiving Premiums must be read in public.

DEFOREST MATHEMATICAL PRIZES, founded by the late Dr. John DeForest (Yale College 1826) and his son, E. L. DeForest (Yale College 1854).—A first prize of one hundred dollars and three second prizes of fifty dollars each, are offered to the Senior Class for worthy solutions of problems in pure and applied Mathematics. This year about sixty dollars from the same source will be offered in prizes to the Junior, Sophomore, and Freshman Classes for the solution of mathematical problems.

WINTHROP PRIZES, the income of a fund of \$5000 given in 1871 by Buchanan Winthrop, Esq. (Yale College 1862), of New York City, are annually offered to the Junior Class "for the most thorough acquaintance with the Greek and Latin poets," particular attention being paid to elegance of scholarship and appreciation of the spirit of the poetry, as shown at an examination during the latter half of the second term. The first prize is two hundred dollars, and the second prize is the balance of the income for the year.

The subjects for the examination in the Class of 1889, are as follows: The Olympian Odes of Pindar; the Agamemnon of Aeschylus; the Medea, Hippolytus, and Bacchantes of Euripides; Lucretius, Book V; the Epistles of Horace; Tibullus (Ramsay's Selections).

A COLLEGE PRIZE of thirty dollars is awarded to the successful competitor at the Junior Exhibition, in the second term of each year. The competition is limited to eight speakers chosen from the higher grades of the Junior appointment list.

COLLEGE PREMIUMS are given each year in the Sophomore Class for English Composition, and for Declamation.

THE SCOTT PRIZE for excellence in German is offered to the Senior Class, and the SCOTT PRIZE for excellence in French to the Junior Class; these are of the value of thirty dollars each, and are given in books, appropriately inscribed. The prizes were founded by the bequest of Henry W. Scott (Yale College 1863), who died in 1871.

BERKELEY PREMIUMS for excellence in Latin Composition are offered to the Freshman Class near the end of the year, from the surplus income of the Berkeley Scholarship Fund.

THE HUGH CHAMBERLAIN GREEK PRIZE, being the income of one thousand dollars given for this purpose in 1886, by the Hon. Daniel H. Chamberlain (Yale College 1862), of New York City, is awarded annually to that member of the Freshman Class who has passed the best examination in the Greek required for admission to College.

Candidates for this Prize will be required to pass the whole examination in Greek, the year of their admission to College, even though they may have been accepted already in some of the Greek subjects at a preliminary examination.

DEGREES

The degree of BACHELOR OF ARTS is conferred by the Corporation on those persons who have completed the course of academical exercises, as appointed by law, and have been approved on examination at the end of the course as candidates for the same. Candidates are required to pay their dues to the Treasurer as early as the Saturday before Commencement.

For the degrees of Master of Arts and Doctor of Philosophy, see pages 95 and 96.

SHEFFIELD SCIENTIFIC SCHOOL

GOVERNING BOARD

REV. TIMOTHY DWIGHT, D.D., LL.D., *President*
GEORGE J. BRUSH, LL.D., *Director, and Professor of Mineralogy*
REV. CHESTER S. LYMAN, M.A., *Professor of Astronomy*
WILLIAM D. WHITNEY, PH.D., LL.D., *Professor of Comparative Philology*
SAMUEL W. JOHNSON, M.A., *Professor of Theoretical and Agricultural Chemistry*
WILLIAM H. BREWER, PH.D., *Professor of Agriculture*
JOHN E. CLARK, M.A., *Professor of Mathematics*
DANIEL C. EATON, M.A., *Professor of Botany*
CHARLES B. RICHARDS, M.A., *Professor of Mechanical Engineering*
THOMAS R. LOUNSBURY, M.A., *Professor of English*
ADDISON E. VERRILL, M.A., *Professor of Zoology, and Instructor in Geology*
SIDNEY I. SMITH, M.A., *Professor of Comparative Anatomy*
WILLIAM G. MIXTER, M.A., *Professor of Chemistry*
A. JAY DUBOIS, C.E., PH.D., *Professor of Civil Engineering*
CHARLES S. HASTINGS, PH.D., *Professor of Physics*
HENRY W. FARNAM, M.A., R.P.D., *Professor of Political Economy*
RUSSELL H. CHITTENDEN, PH.D., *Professor of Physiological Chemistry*

ADDITIONAL INSTRUCTORS

ALBERT S. WHEELER, M.A., *Instructor in German*
WILLIAM I. KNAPP, PH.D., *Professor of French*
MARK BAILEY, M.A., *Instructor in Elocution*
JOHN H. NIEMEYER, M.A., *Professor of Drawing*
FREDERIC R. HONEY, PH.B., *Instructor in Descriptive Geometry and Projection Drawing*
THOMAS W. MATHER, D.E., *Instructor in Mechanical Engineering*
SAMUEL L. PENFIELD, PH.B., *Instructor in Mineralogy*
ALTON W. LEIGHTON, M.D., *Assistant in Drawing*
HORACE L. WELLS, PH.B., *Instructor in Analytical Chemistry*
SAMUEL E. BARNEY, C.E., *Instructor in Mathematics and Civil Engineering*
LOUIS V. PIRSSON, PH.B., *Assistant in Analytical Chemistry*
WILLIAM PRICE, B.A., *Instructor in French*
GEORGE W. CUMMINS, PH.D., *Instructor in Mathematics*
ERWIN S. SPERRY, PH.B., *Assistant in Analytical Chemistry*

THE SHEFFIELD SCIENTIFIC SCHOOL is devoted to instruction and researches in the mathematical, physical, and natural sciences, with reference to the promotion and diffusion of science, and also to the preparation of young men for such pursuits as require special proficiency in these departments of learning. Instruction is also given in French, German, English, History, Political Economy, and Constitutional Law.

The school, begun in 1847, and reorganized upon a more extensive scale in 1860, received in 1863, by the act of the Connecticut Legislature, the national grant for the promotion of scientific education under the Congressional enactment of July, 1862.

The name was conferred upon it by the Corporation of the University as a recognition of the late Joseph E. Sheffield, Esq., whose gifts to it at various times constitute its chief property and endowment.

OFFICERS AND INSTRUCTORS—Upon the Governing Board, consisting of the professors permanently attached to the School, devolve its internal management and the greater part of the instruction. In addition to these and the instructors employed during the current year, Professor Niemeyer, of the Yale School of the Fine Arts, gives instruction in Elementary and Free-hand Drawing.

THE BOARD OF STATE VISITORS consists of the Governor, the Lieutenant Governor, three Senior Senators, and the Secretary of the Board of Education.

The instruction is intended for two classes of students:—

I.—Graduates of this and other Colleges or Universities, and other persons qualified for advanced or special study.

II.—Undergraduates who desire a training, chiefly mathematical and scientific, in part linguistic and literary, for higher scientific studies, or for other occupations to which such training is suited.

INSTRUCTION FOR GRADUATE AND SPECIAL STUDENTS

Persons who have gone through undergraduate courses of study, here or elsewhere, may avail themselves of the

facilities of the School for more special professional training in the physical sciences and their applications, gaining in one, two, or three years the degree of BACHELOR OF PHILOSOPHY, or in two additional years of Engineering study, that of CIVIL ENGINEER or that of DYNAMIC or MECHANICAL ENGINEER.

Or, engaging in studies of a less exclusively technical character, they may become candidates for the degree of DOCTOR OF PHILOSOPHY, under the conditions stated on page 96. The instruction in such cases will be adapted to the particular needs and capacities of each student, and may be combined with that given by instructors in other departments.

SPECIAL STUDENTS—For the benefit of those who, being fully qualified, desire to pursue particular studies without reference to obtaining a degree, special or irregular students are received in most of the departments of the School; not, however, in the Select Course, nor in the Freshman Class. It should be distinctly understood that these opportunities are not offered to persons who are incompetent to go on with regular courses, but are designed to aid those who have received a sufficient preliminary education elsewhere to increase their proficiency in special branches.

INSTRUCTION FOR UNDERGRADUATE STUDENTS

TERMS OF ADMISSION—Candidates must be not less than fifteen years of age, and must bring satisfactory testimonials of moral character from their former instructors or other responsible persons.

For admission to the Freshman Class the student must pass a thorough examination in the following subjects:

English—including grammar, spelling, and composition. In grammar, Whitney's Essentials of English Grammar, or an equivalent.

History of the United States.

Geography.

Latin—(1) Simple exercises in translating English into Latin. (Smith's "*Principia Latina*," Part i, is named as indicating the nature and extent of this requirement, and an acquaintance with it will be required

unless a satisfactory substitute is offered.) (2) Caesar—six books of the Gallic War, or their equivalent. (As advantageous substitutes for the last three books of Cæsar may be suggested three books of Vergil's *Aeneid*, or a similar amount of Ovid.)

Arithmetic—Fundamental Operations, Least Common Multiple, Greatest Common Divisor, Common and Decimal Fractions, Denominate Numbers, including the Metric System of Weights and Measures; Percentages, including Interest, Discount, and Commission; Proportion, Extraction of the Square and Cube Roots.

Algebra—Fundamental Operations, Fractions, Equations of the First Degree, with one or several unknown quantities; Inequalities, Ratio and Proportion, Powers and Roots, including the theory of Exponents, the Binomial Formula for an Entire Exponent, and the Transformation and Reduction of Radicals; Equations of the Second Degree, Progressions, Continued Fractions, Permutations and Combinations, the Doctrine of Limits, the Nature of Series, the Method of Indeterminate Coefficients, Fundamental Properties of Logarithms, Compound Interest and Annuities.

Geometry—Plane, Solid, and Spherical; including fundamental notions of Symmetry, and examples of Loci and Maxima and Minima of Plane Figures,—so much, for example, as is contained in Newcomb's *Geometry*, exclusive of the chapters on the Ellipse, Hyperbola, and Parabola.

Trigonometry—including the Analytical Theory of the Trigonometrical Functions, and the usual formulæ; the Construction and Use of Trigonometrical Tables; and the Solution of Plane Triangles;—so much, for example, as is contained in the first six chapters of Newcomb's larger *Trigonometry* and in Arts. 75-78 of chapter viii, with the explanation of the first five tables in Newcomb's *Five-figure Logarithmic and Trigonometric Tables*, which are furnished at the examinations in New Haven.

While no entrance examination is held in the *History of England*, candidates for admission are urgently advised to make themselves as familiar as possible with that subject, as a knowledge of it is essential to the most successful prosecution of some of the studies of the course.

Candidates will be allowed the option of passing on the above-named subjects in two successive years. In such cases they must present themselves for examination at the June examination of the first year in the following subjects or parts of subjects: *History of the United States, Geography, Arithmetic, Plane Geometry, and Algebra to Quadratic Equations.*

In order to have this preliminary examination counted, candidates must pass satisfactorily on four of the subjects;

and notice of the intention to divide the examination must be given to Professor George J. Brush, Director of the School, on or before June 15.

In his preparation in *GEOMETRY* the candidate should, as far as practicable, have suitable exercises in proving simple theorems and in solving simple problems for himself. It is important, too, that he should be accustomed to the numerical application of geometric principles, and especially to the prompt recollection and use of the elementary formulae of mensuration. In *TRIGONOMETRY* he should be exercised in applying the usual formulae to a variety of simple reductions and transformations, including the solution of trigonometrical equations. Readiness and accuracy in trigonometrical calculations are also of prime importance to the candidate. If the use of logarithms is postponed in his preparation till Trigonometry is taken up (which is by no means necessary or advisable), he should then have abundant applications of them to all forms of calculation occurring in ordinary practice, as well as to those appearing in the solution of triangles. Finally, in all his calculations, he should study the art of neat and orderly arrangement.

In *LATIN* the student should have such continued training in parsing as shall make him thoroughly familiar with declensions and conjugations, and with the leading principles of syntax. To secure these results more effectually, the requirement has been adopted of simple exercises in translating English into Latin. As this course of exercises is designed solely as a preparation for reading, it should be begun at the earliest stage of Latin study. A very large proportion of the deficiencies in the Latin examination for several years past has been due to the neglect of the suggestions of this paragraph, and to the attempt to read a Latin author with totally inadequate grammatical preparation.

The examinations for admission in 1888 take place at North Sheffield Hall, on Thursday, Friday, and Saturday, June 28, 29, 30 (beginning at 9 A. M. on Thursday); and on Tuesday and Wednesday, September 18, 19 (beginning at 9 A. M. on Tuesday).

In general, examinations for admission to the Freshman Class of the *next* year can be held only in June and September as specified; if in any case sufficient reason exists for an exception to this rule, a special fee (not exceeding fifty dollars) will be charged.

In 1888 examinations (for the Freshman Class only) will

also be held in Exeter, N. H., in Andover, Mass., in New York City, in Chicago, in Cincinnati, and in San Francisco (beginning on Thursday, June 28, at 9 A. M.), at places to be announced in local newspapers of the day previous. Candidates who propose to be present are requested to send their names to Professor George J. Brush, Director of the School, before June 15. A fee of five dollars will be charged for admission to the examinations outside of New Haven.

Candidates for advanced standing in the undergraduate classes are examined, in addition to their preparatory studies, in those already pursued by the class which they wish to enter. No one can be admitted as a candidate for a degree, later than at the beginning of the Senior year.

COURSES OF INSTRUCTION, occupying three years, are arranged to suit the requirements of various classes of students. The first year's work is the same for all; for the last two years the instruction is chiefly arranged in special Courses. The Special Courses most distinctly marked out are the following:

- | | |
|---|----------------------------|
| (a.) In Chemistry; | (b.) In Civil Engineering; |
| (c.) In Mechanical Engineering; | |
| (d.) In Agriculture; | (e.) In Natural History; |
| (f.) In Biology preparatory to Medical studies; | |
| (g.) In studies preparatory to Mining and Metallurgy; | |
| (h.) In select studies preparatory to other higher studies. | |

The arrangement of studies is indicated in the annexed scheme. A fuller statement of the methods and character of the instruction will be found below, p. 78. Unless otherwise specified, the number of hours given means hours per week.

FRESHMAN YEAR: INTRODUCTORY TO ALL THE COURSES

FIRST TERM:—*German*—Whitney's Grammar and Reader, 3 hrs. *English*—Lounsbury's History of the English Language, 1 hr.; Exercises in composition. *Mathematics*—The Derivatives of Algebraic Functions; Fundamental Properties of Equations; Plane Analytical

Geometry; 3 hrs. *Physics*—Recitations, 2 hrs., with experimental lectures, 2 hrs. *Chemistry*—Recitations, 2 hrs.; laboratory practice, 2 hrs. *Elementary Drawing*—Practical Lessons in the Art School, 3 hrs.

SECOND TERM:—*Language, Physics, and Chemistry*—as stated above. *Mathematics*—Plane Analytical Geometry, continued; Spherical Trigonometry (Newcomb's); 3 hrs. *Physical Geography*—8 Lectures during the term. *Botany*—Gray's Lessons, 3 hours. *Drawing*—Principles of Orthographic Projection; Isometric Drawing with application to drawing from models and structures, and isometric construction of objects from their orthographic projections; Projections of Shadows; Shading and tinting; Sections; Developments and Intersections of Surfaces; 4 hrs.

For the Junior and Senior years the students select for themselves one of the following Courses:

(a.) IN CHEMISTRY:

JUNIOR YEAR:

FIRST TERM:—*Organic Chemistry*—Lectures and Recitations, 2 hrs. *Qualitative Analysis*—Recitations, 2 hrs.; Laboratory Practice, 20 hrs.; Blowpipe Practice and Determinative Mineralogy, 4 hrs. *German*—3 hrs. *French*—3 hrs.

SECOND TERM:—*Organic Chemistry*—Lectures and Recitations, 2 hrs. *Quantitative Analysis*—Laboratory Practice, 20 hrs.; Recitations, 2 hrs. *Mineralogy*—Blowpipe Analysis and determination of species, 4 hrs.; Lectures in Crystallography and Descriptive Mineralogy, 2 hrs. *French*—3 hrs. *German*—3 hrs.

SENIOR YEAR:

FIRST TERM:—*Organic and Theoretical Chemistry*—Recitations and Lectures, 2 hrs. *Agricultural Chemistry*—Recitations (optional), 2 hrs. *Quantitative Analysis*—continued six weeks, 20 hrs. *Organic Chemistry*—Experimental work during the remainder of the term, 20 hrs. *Geology*—Dana's; Recitations, 3 hrs. *Zoology*—Lectures, 2 hrs. *French*—3 hrs.

SECOND TERM:—*Theoretical Chemistry*—continued, 2 hrs. *Zoology*—continued, 2 hrs. *Agricultural Chemistry*—(optional), 2 hrs. *Analytical Chemistry*—Analysis of Minerals and Technical Products, 20 hrs. *Assaying*—(optional). *Metallurgy*—Lectures (optional). *Geology*—Dana's, 3 hrs. *Mineralogy*—(optional). *French*—3 hrs., during Winter half-term.

The Laboratory Practice of the second term of the Senior Year may be devoted to such special branches of Analytical or Organic Chemistry as the student may desire, or to original investigations in connection with theses.

(b.) IN CIVIL ENGINEERING:

JUNIOR YEAR:

FIRST TERM:—*Mathematics*—Analytical Geometry of Three Dimensions; Elements of the Theory of Functions; Differential Calculus, with applications to Geometry and Analysis; solution of Numerical Equations; 6 hrs. *Surveying*—Field work, 16 hrs. till November. *Drawing*—Descriptive Geometry, 6 hrs. from November. *German*—3 hrs. *French*—3 hrs.

SECOND TERM:—*Mathematics*—Integral Calculus with applications to Geometry; Rational Mechanics; 6 hrs. *Drawing*—Descriptive Geometry, concluded; Topographical; Practice in working drawings; 6 hrs. *Surveying*—Topographical and Rail Road curves, 16 hrs. *German*—3 hrs. *French*—3 hrs.

SENIOR YEAR:

FIRST TERM:—*Field Engineering*—Location of line of Railroad, setting out, slope stakes, calculation of earth work; Lectures on economic location; Office work; Henck's Field Book; 20 hrs. till November. *Civil Engineering*—Mechanics applied to Engineering; Resistance of Materials; Bridges and Roofs; Stone Cutting with Graphical Problems; 8 hrs. *Geology*—Dana's, 3 hrs. *Mineralogy*—Blowpipe Analysis and Determinative Mineralogy, 4 hrs. *French*—3 hrs.

SECOND TERM:—*Civil Engineering*—Bridges and Roofs; Building Materials; Stability of Arches and Walls; Foundations; 6 hrs. *Dynamics*—Principles of Mechanism; Thermodynamics; Steam Engine; 6 hrs. *Hydraulics*—Hydraulics and Hydraulic Motors, 3 hrs. *Drawing*—Designing; Practical Problems; Specifications and Estimates; 12 hrs. *Astronomy*—Practical Astronomy, with field work, 6 hrs. *Mineralogy*—continued during Winter half-term, 4 hrs. *Geology*—3 hrs. *French*—3 hrs. during Winter half-term.

(c.) IN MECHANICAL ENGINEERING:

JUNIOR YEAR:

FIRST TERM:—*Mathematics*—Analytical Geometry of Three Dimensions; Elements of the Theory of Functions; Differential Calculus, with applications to Geometry and Analysis; Solution of Numerical Equations; 6 hrs. *Surveying*—Theory and Practice; 3 hrs. until November 1st. *Principles of Mechanism*—Kinematics; 1 hr. *Shop Visiting*—Study of Machine Details and Tools; 3 hrs., beginning when Surveying ends. *Drawing*—Descriptive Geometry, 3 hrs. *German*—3 hrs. *French*—3 hrs.

SECOND TERM:—*Mathematics*—Integral Calculus, with applications to Geometry; Rational Mechanics; 6 hrs. *Principles of Mechanism*—

Applied Kinematics; Forms of Teeth of Wheels; Cams; Parallel Motions; Transmission of Power by Belts and Gearing, etc.; 1 hr. until Spring recess, then 2 hrs. *Shop Visiting*—continued, 3 hrs., until Spring recess. *Study of the Steam Engine*—2 hrs. after Spring recess. *Drawing*—Perspective and Shadows; Machine Elements; 3 hrs. *German*—3 hrs. *French*—3 hrs.

SENIOR YEAR:

FIRST TERM:—*Applied Mechanics*—Friction; Moment of Inertia; Centrifugal Force; Elasticity and Strength of Materials; Theory of Flexure and Torsion; Strains in Structures; Construction of Roofs and Bridges; Equilibrium and Pressure of Fluids; Theory of Flotation; Flow of Fluids in Pipes and Channels; Resistance of Ships; 9 hrs. *Machine Designing*—Practical Exercises in Designing Machine Details and Simple Machines, 12 hrs. *Study of the Steam Engine*—continued, 2 hrs. *Visits of Inspection*—Examination of Machinery in operation; Reports of Visits. *French*—3 hrs.

SECOND TERM:—*Applied Mechanics*—continued; Hydrodynamics; Theory of Water-Wheels and Turbines; 6 hrs. *Thermodynamics*—3 hrs. *Study of the Steam Boiler*—2 hrs. *Machine Designing*—continued; advanced exercises in Preparing Designs and Working Drawings for Machinery; Estimates of Weight and Cost of Machinery; 12 hrs. *French*—3 hrs. during Winter half-term. *Thesis. Visits of Inspection and Reports.*

(d.) IN AGRICULTURE:

JUNIOR YEAR:

The course is identical with that in Chemistry, except that in the second term lectures in Crystallography and Descriptive Mineralogy are omitted, and in the Spring half-term Botany is substituted for Determinative Mineralogy.

SENIOR YEAR:

FIRST TERM:—*Agriculture*—Recitations, 2 hrs. *Agricultural Chemistry*—Recitations, 2 hrs. *Geology*—Recitations, 3 hrs. *Zoology*—Lectures, 2 hrs. *Meteorology*—Lectures, 2 hrs. *Botany*—Laboratory Practice, 5 hrs. *English*—Recitations, 2 hrs. *French*—Recitations, 3 hrs.

SECOND TERM:—*Agriculture*—Recitations or Lectures, 2 hrs. *Agricultural Chemistry*—Recitations, 2 hrs. *Physiology*—Recitations or Lectures, 2 hrs. *Geology*—Recitations, 3 hrs. *Zoology*—continued, 2 hrs. *English*—Recitations, 3 hrs. *Heredity and Stock-Breeding*—Lectures, 2 hrs. during Winter half-term. *Sanitary Science and Public Health*—Lectures, 2 hrs. during Spring half-term. *French*—3 hrs. during Winter half-term.

(e.) IN NATURAL HISTORY :

Either Mineralogy, Zoology, or Botany, may be made the principal laboratory study, some attention in each case being directed to the other branches of Natural History.

JUNIOR YEAR :

FIRST TERM:—*Organic Chemistry*—Lectures and Recitations. *Qualitative Analysis*—Fresenius's; Laboratory Practice; Recitations. *Mineralogy*—Blowpipe Analysis and Determinative Mineralogy, 4 hrs. *Botany*—Gray's Manual, 3 hrs.; Laboratory Practice, 3 hrs. *German*—3 hrs. *French*—3 hrs.

SECOND TERM:—*Zoology*—Laboratory Practice, 6 to 12 hrs.; Recitations; Excursions (land and marine). *Botany*—Lectures; Laboratory Practice in the identification of Phaenogamous Plants, 2 hrs. *Physiology*—Huxley's. *Embryology*—Lectures. *Mineralogy*—Blowpipe Analysis and Determinative Mineralogy, 4 hrs. Lectures in Crystallography and Descriptive Mineralogy, 2 hrs. *Physical Geography*. *German*—3 hrs. *French*—3 hrs.

SENIOR YEAR :

FIRST TERM:—*Geology*—Dana's, 3 hrs.; Excursions. *Zoology*—Laboratory Practice, 8 to 12 hrs.; Lectures, 2 hrs.; Recitations, 2 hrs.; Excursions. *Botany*—Laboratory Practice in the Preparation and Examination of Microscopical Specimens, illustrative of Stem-structure and of the Anatomy of the higher Cryptogamous Plants, 5 hrs.; Excursions. *Meteorology*—Lectures, 2 hrs. *French*—3 hrs.

SECOND TERM:—*Geology*—Dana's, 3 hrs. *Anatomy of Vertebrates*—Huxley's, 2 hrs. *Zoology*—Laboratory Practice, 8 to 12 hrs.; Recitations, 2 hrs.; Lectures, 2 hrs. *Botany*—Herbarium Studies, especially in the Cryptogamous Orders; Botanical Literature; Essays in Descriptive Botany. *Sanitary Science*, *Laws of Heredity*, and *Principles of Breeding*—Lectures. *French*—3 hrs. during Winter half-term.

Besides the regular courses of recitations and lectures on structural and systematic Zoology and Botany, and on special subjects, students are taught in the laboratories to prepare, arrange, and identify collections, to make dissections, to pursue investigations, and when sufficiently advanced, to describe genera and species in the language of science. For these purposes, large collections in Zoology belonging to the College are available, as are also the private botanical collections of Professor Eaton.

(f.) IN BIOLOGY PREPARATORY TO MEDICAL STUDIES:

JUNIOR YEAR:

FIRST TERM:—*Organic Chemistry*—Lectures and Recitations, 2 hrs. *Qualitative Analysis*—Fresenius's; Laboratory Practice, 20 hrs.; Recitations, 2 hrs. *Mineralogy*—Blowpipe Analysis and Determinative Mineralogy, 4 hrs. *German*—3 hrs. *French*—3 hrs.

SECOND TERM:—*Anatomy and Histology*—Laboratory Practice, 18 hrs.; Lectures and Recitations, 1 hr. *Physiology*—Huxley's; Recitations, 2 hrs. *Embryology*—8 Lectures during the term. *Organic Chemistry*—continued, 2 hrs. *Mineralogy*—continued through Winter half-term, 4 hrs. *Botany*—Lectures; Laboratory Practice in the identification of Phaenogamous plants, 5 hrs. during Spring half-term; Excursions. *German*—3 hrs. *French*—3 hrs.

SENIOR YEAR:

FIRST TERM:—*Physiological Chemistry*—Recitations and Lectures, 3 hrs.; Laboratory Practice, 13 hrs. *Organic and Theoretical Chemistry*—Lectures and Recitations, 2 hrs. *Zoology*—Lectures, 2 hrs. *Botany*—Laboratory Practice in the Preparation and Examination of Microscopical Specimens, illustrative of Stem-structure, and of the Anatomy of the higher Cryptogamous Plants, 5 hrs. *Geology*—Dana's, 3 hrs. *French*—3 hrs.

SECOND TERM:—*Physiological Chemistry and Experimental Toxicology*—Illustrative Lectures, Recitations, and Laboratory Practice, 27 hrs. *Geology*—Dana's, 3 hrs. *Zoology*—continued, 2 hrs. *Sanitary Science*—Lectures, 2 hrs. during Spring half-term. *Laws of Heredity and Principles of Breeding*—Lectures, 2 hrs. during Winter half-term. *French*—3 hrs. during Winter half-term.

(g.) IN STUDIES PREPARATORY TO MINING AND METALLURGY:

Young men desiring to become Mining Engineers can pursue the regular Course in Civil or Mechanical Engineering, and at its close can spend a fourth year in the study of Metallurgical Chemistry, Mineralogy, etc.

(h.) IN THE SELECT STUDIES PREPARATORY TO OTHER HIGHER STUDIES:

JUNIOR YEAR:

FIRST TERM:—*Mineralogy*—Blowpipe Analysis and Determinative Mineralogy, 8 hrs. *Astronomy*—Recitations, 4 hrs. *English*—Early English, 2 hrs. *History*—Green's Short History of the English People, 2 hrs. *French*—3 hrs. *German*—3 hrs.

SECOND TERM:—*Mineralogy*—Lectures; Laboratory work, 8 hrs. during Winter half-term. *Botany*—Lectures; Laboratory Practice in the identification of Phaenogamous Plants, 2 hrs. during Spring half-term. *Physical Geography*—4 hrs. during Winter half-term; Recitations from Guyot and Lectures. *English*—Chaucer, Bacon, Shakspeare, 2 hrs. during Winter half-term, 3 hrs. during Spring half-term. *History*—Green's History, continued, 2 hrs. during Winter half-term, 4 hrs. during Spring half-term. *German*—3 hrs. *French*—3 hrs.

SENIOR YEAR:

FIRST TERM:—*Geology*—Recitations, 3 hrs.; Excursions. *Zoology*—Lectures, 2 hrs. *English*—Shakspeare, 2 hrs. *Meteorology*—Lectures, 2 hrs. *Constitutional Law*—4 hrs. *French*—3 hrs.

SECOND TERM:—*Geology*—continued, 3 hrs. *Zoology*—continued, 2 hrs., during Winter half-term. *Meteorology*—Lectures, 2 hrs. during Winter half-term. *Sanitary Science*—Lectures, 2 hrs. during Winter half-term. *Political Economy*—Recitations, Exercises and Lectures, 4 hrs. *English*—Shakspeare, Milton, Dryden, Pope, Gray, and later authors, 3 hrs. *French*—3 hrs. during Winter half-term.

Exercises in English Composition are required during the entire course from all the students. The preparation of graduating theses is among the duties of the Senior year.

Lectures on Military Science and Tactics are annually given by officers of the United States Army.

The following account of the various subjects specified in the above scheme will explain the character and aim of the instruction.

ELEMENTARY CHEMISTRY.—The exercises in Elementary Chemistry consist in recitations from a text-book and experiments by the students in the laboratory to illustrate statements in the book. The object of the laboratory work is to facilitate the study of the subject, and to train the students in manipulation and in the observation of chemical phenomena. Notes are required and students are questioned on the experiments. As the class is divided according to scholarship in Chemistry and Physics, opportunity is given to those who are most proficient to make rapid progress.

ANALYTICAL CHEMISTRY.—*Qualitative* and *Quantitative*.—This study is intended to serve two purposes. Analytical Chemistry is used by the

advanced student as a means of investigation in scientific or technical researches. The beginner, however, derives from its study advantages of another kind. The knowledge of the properties of chemical compounds, the familiarity with chemical reactions gained by experience in the laboratory, and the development of the reasoning faculties by the application of this knowledge in analytical processes, enable the student to generalize and classify chemical phenomena and aid him to understand the more abstract theories of chemical philosophy. The method of instruction adopted is conformed to this view of the uses of the study. Text-books are used and recitations are required, but the more important part of both study and instruction is performed in the laboratory. In order to solve the problems which are there constantly presented, the student, aided by books and instructors, must learn both principles and their applications. The student, throughout his course in Analytical Chemistry, spends four consecutive hours in laboratory work during five days of the week. The laboratory, however, is kept open seven hours daily for the benefit of graduate students and others who desire to devote more time to this study.

Qualitative Analysis forms a part of the courses in Chemistry, Biology, Agriculture, and Natural History. Quantitative Analysis is one of the more important studies of the Senior year in the Chemical Course. It is also included to some extent in the Agricultural Course.

ORGANIC CHEMISTRY is taught by informal lectures and experimental illustrations as well as by text-book drill, a lesson from Richter's Organic Chemistry being given out for each instruction-hour. The class has two exercises weekly throughout three terms. The course is adapted to give a fairly complete outline of the subject and some familiarity with the more important bodies and classes of bodies.

In addition to this, the Senior students in the Chemical Course are required to spend 20 hours per week during the latter half of the first term in experimental work in Organic Chemistry. This is intended to supplement the preceding course and at the same time to serve as a preliminary training for such students as desire to make a special study of Organic Chemistry.

Opportunity is also afforded for the carrying on of original investigations in this subject, either in connection with theses or as a part of the regular work in the case of advanced students.

PHYSIOLOGICAL CHEMISTRY and EXPERIMENTAL TOXICOLOGY.—Physiological Chemistry is taught by laboratory exercises, illustrative lectures, and recitations. Each student is provided with a suitable working place in the laboratory, well equipped with all needed apparatus and material. The regular course of work, designed especially for Senior students in the Biological Course, extends throughout one year and embraces a thorough study of the chemical composition of the various

tissues and fluids of the body, together with a study of the chemical and physiological processes of respiration, digestion, secretion, excretion, and nutrition in general.

Beginning with a study of the albuminous bodies, the experimental work extends through the epithelial, connective, contractile, and nerve tissues. Proceeding then to digestion, the various digestive fluids are studied, artificial digestions are made, and the several products of digestive action isolated and studied. The blood and urine are next considered, and students are taught to make both qualitative and quantitative analyses of the latter and to identify abnormal constituents. A portion of one term is also devoted to a study of the chemical reactions of the more important mineral and organic poisons, and their physiological action determined experimentally. Students are also taught how to separate poisons from organic tissues and fluids, and to identify them both by chemical and physiological reaction. During the latter half of the second term, Senior year, opportunity is afforded for the carrying on of original investigations on some selected subject in either physiological chemistry or toxicology, in connection with the preparation of graduating theses. The course of work is particularly recommended to students intending to enter upon a course of medical studies.

ANATOMY AND ELEMENTARY PHYSIOLOGY.—The object sought in the instruction in Anatomy and Physiology, as taught during Junior year, is the manual and mental training of the student in the methods of investigation by which the facts and principles of these sciences have been established, and at the same time to give him a sufficient knowledge of their elements to enable him to pursue with profit the special studies of the Biological Course as a preparation for medical studies. With this end in view, four forenoons each week are given to laboratory work in Anatomy and Histology. The student, under the immediate supervision of the instructor, dissects specimens of a number of different animals, and is required to make careful sketches and records of his work; he also examines the different animal tissues with the microscope, makes microscopical preparations, and is taught the methods of anatomical and histological investigation. This work is reviewed each week by means of text-book and recitation or lecture and examination. The elements of Human Physiology are taught by text-book, recitations, and demonstrations. The physiology of digestion and nutrition is taught during Senior year in connection with Physiological Chemistry. During the last part of the term there is a short course of lectures on Embryology with special reference to Human Morphology.

GEOLOGY.—The course in Geology includes recitations and oral instruction extending through the entire year on alternate mornings. During the first half-year, the recitations are attended by the entire

Senior Class, except those in the course in Mechanical Engineering. This part of the course includes Physical, Lithological, and Dynamical Geology. These subjects are illustrated by diagrams and specimens. During the first term each student is required to make a collection containing a specified number of the most important rocks and minerals, and to pass a thorough examination upon them at the end of the first term; the object is to compel every student to become personally familiar with the appearance as well as with the composition and other characters of the rocks and minerals that are of most importance in Geology, as well as in the arts.

The last half of the year is devoted to Historical Geology and Palaeontology. This part of the course is pursued by all the Seniors except those in the courses in Mechanical and Civil Engineering. Suitable collections of fossils are used to illustrate the subject.

Opportunities are afforded for optional geological excursions during the warmer months.

MINERALOGY.—The instruction in Mineralogy is carried on by means of practical work in a laboratory especially fitted up for the purpose, and is intended to familiarize the student with the common minerals, attention being devoted especially to those which are of economic, geological, or scientific importance. To understand better the chemistry of the subject, the student is first made familiar with the simple chemical and blow-pipe reactions useful in testing minerals, and applies this knowledge later to the determination of unknown species. The students have access to a labeled collection where they can study the properties of the minerals and make comparisons, and also to extensive unlabeled collections, arranged especially to give them practice and facility in the correct identification of minerals. In addition to the laboratory work, instruction is given in Crystallography, illustrated by a collection of models and natural crystals. The lectures in Descriptive Mineralogy to the more advanced students are illustrated by means of the extensive private collection of Professor Brush. The laboratory is provided with apparatus for the thorough chemical or physical investigation of minerals and with an extensive library to which the students have access. The laboratory is open seven hours each day to accommodate any who desire to devote more time and attention to the subject than is laid out in any of the prescribed courses.

ZOOLOGY.—The instruction in Zoology includes a course of lectures on Systematic Zoology, Morphology, and Embryology, which are attended by all the Seniors except those in the courses in Mechanical and Civil Engineering. These lectures are generally given twice a week, and continue during about half the year. The students are required to keep careful notes of the lectures.

Students in the Natural History Course are also required to pursue a course of laboratory instruction during the second term of the Junior and all of the Senior year. This generally occupies two to four hours a day on four days of each week. It includes dissections of various classes and orders of animals, with microscopic studies of the finer structures and of minute animal forms, as well as work in Systematic Zoology.

Special courses of recitations or lectures on particular subjects are also given when desirable.

BOTANY.—The scheme of instruction provides for three successive courses of study, as either ending the study for the ordinary student, or introducing it for one who desires to become a professional botanist.

The first or elementary course, which is required of all the Freshmen, is designed to teach the nature of the visible organs of flowering plants, tracing the life-history of vegetation from seed, through stem and root, leaves, branches, buds, blossoms and fruit, to seed again. The method consists mainly in the use of some easy text-book, like Gray's *Lessons*, with whatever illustrations and explanations may be needed to secure the student's attention. The second course, coming the next year, is restricted to the sections in Biology, Natural History, Agriculture, and Selected studies, and is intended to enable the student to recognize the chief natural orders of native plants, with the ability to identify the common species. The class meets two or three times a week in spring and summer, and is practiced in identifying plants, using Gray's *Manual* as a standard, and employing the ordinary simple dissecting microscope. At this point the instruction for the Select Course ceases; in the next fall term the work for the Courses in Biology, Natural History, and Agriculture is entirely practical, books being used only for reference. Students begin with cutting thin sections of some common woody and herbaceous stems, and are shown how to prepare such sections for examination and for permanent preservation as microscopic objects. After acquiring some facility in microscopical manipulation, various parts of flowering plants are brought in for dissection and examination, and towards the close of the term some attention is given to Ferns, Mosses, and Algae. This finishes the course for ordinary students; for those who may desire to prosecute the science professionally, the work is arranged to suit individual requirement, whether it be in the direction of Histology, or of Systematic Botany as applied to flowering plants, or to Ferns, Mosses, Hepatics, or Algae.

AGRICULTURE.—The special instruction in the science of Agriculture is by recitations and lectures, with such aids and appliances as are suited to the class-room. Besides Agricultural Chemistry, it includes a discussion of the cultivation of the staple field crops of the country; the production of live stock; theories of rural economy and systems of husbandry; the laws of heredity and principles of stock-breeding.

SANITARY SCIENCE.—The lectures on this subject discuss the natural laws which govern the public health; their relation to the social habits and condition of communities; instruction in the use of mortuary statistics; epidemics and pestilences, with their relations to the prosperity of a community, and methods of control; the germ theory of disease and theory of disinfectants; the hygiene of private dwellings and public buildings; the relations of public health to water supply and to sanitary engineering; legislation relating to the public health and the methods of official sanitary administration.

MATHEMATICS.—The Mathematical studies of the Freshman Year are pursued by all members of the class; those of the Junior Year by students in the courses of Engineering and properly qualified Special Students who may choose them. During the latter year, in connection with the instruction briefly indicated in the scheme above [p. 74], a course of familiar lectures is given to supplement the ordinary classroom exercises.

PHYSICS.—The object of the experimental lectures is not only to elucidate the subjects treated in the text-book employed, but also to extend the treatment of such subjects, and to introduce others where thought desirable. A considerable portion of the work of the year is the preparation for recitation on matter thus presented.

At the end of November the Freshman class is redivided into three sections, according to capacity shown in the subjects of Chemistry and Physics. After this, although the experimental lectures will be attended as before by the class as a whole, the higher divisions will be able to pursue the studies more thoroughly.

The facilities of the Physical Laboratory will be extended to such graduate students and Seniors as may desire them.

Course in Advanced Physics—A course of two lectures per week, beginning in January, supplemented by laboratory work. The earlier portion of the time is devoted to the theory of observation and the method of least squares. The course is optional to all who have a command of the calculus.

CIVIL ENGINEERING.—The object of this course is to give a thorough preparation, first of all, in the principles of the various sciences involved, and afterwards, as extensive practice in the application of these principles as the time at disposal, the ability of the students, and the facilities and plant permit.

Under the first head are included such subjects as Mathematics, Physics, Mechanics, Thermodynamics, Astronomy, Geology, Mineralogy, Chemistry, and Botany; and under the second head, Drawing, Surveying, Strength and Properties of Materials, and Design and Construction of various kinds, such as Bridges, Roofs, Foundations, Arches, Retain-

ing Walls, Dams, Water Works, Railroads, Improvement of Rivers and Harbors, Sewerage and Drainage, Water Motors, etc.

The first division includes Civil Engineering as a Science, the other Civil Engineering as an Art. The ground covered by the first is definite, and the instruction is made as thorough as possible. The ground covered by the second is of almost indefinite extent. Here, by a careful selection of practical examples, such as occur in engineering practice, the application of principles is illustrated, and together with the analytical or algebraic methods, the student is also instructed in practical graphic solutions, wherever such solutions present a special value. Much time is devoted to geodetic operations and to surveying in the field. Instruction is given in the practical operations connected with the reconnaissance, location, and surveys of roads, canals, and railroads, such as setting out, cross-sectioning, setting grade stakes, calculation of earth work, etc. Thorough instruction is given in drawing and design, the construction of working drawings and principles of designing as applied to bridges, roofs, etc.

The instruction is by means of practical exercises, lectures, and recitations, so combined as to develop so far as possible the mental powers of the student. Visits of inspection are made at suitable intervals to private and public works of engineering interest.

The entire course requires five years, three years of undergraduate and two of graduate instruction; and a Thesis of merit upon some approved subject, accompanied by designs and estimates, is required upon the completion of the course, as also at the end of the first three years. Examinations are also held at the end of every term and year.

In what follows, such details are given as may be of interest to those who contemplate taking the course.

Mathematics—6 hours weekly, Junior Year, both terms. See Synopsis of Course.

French and German—Students in this course take in the Junior Year the regular studies of the Junior Class in both German and French, 3 hours each. In the Senior Year, French is continued, 3 hours, during the Winter half-term.

Drawing and Descriptive Geometry—Drawing is begun at once in the first term of Freshman Year, under the charge of the Street Professor of Drawing in the Art School, and includes practice in free hand drawing. In the second term, under the Instructor in Instrumental Drawing, the students take isometric drawing with application to drawing from models and structures by measurement, shading, tinting, conventional use of colors, principles of orthographic projections, and practice in making simple working drawings, 4 hours both terms.

The Drawing of Junior Year, 3 hours, both terms, includes Descriptive Geometry, the drawing of structures from measurement, and elements of design for simple structures. The instruction is by recitations,

lectures, practical exercises and models, and is under the charge of the Instructor in Instrumental Drawing and the Professor and Instructor in Civil Engineering. Included in the work of this year is also the mapping of surveying field notes.

In the Senior Year, the drawing consists of the mapping of the surveys of that year, and the designing of structures and finished drawings, designs and estimates, under the charge of the Professor and Instructor in Civil Engineering, 6 hours both terms.

Surveying and Field Engineering—The instruction in the field occupies about 20 hours for six or more weeks in both terms of Junior and Senior Year. The exercises at these times are so arranged as to secure as much consecutive time as possible in the field. In Junior Year the use and adjustments of the instruments are learned and practice surveys made, together with recitations and lectures upon surveying operations and methods of keeping field notes. Levels are run, surveys made, plotted and checked; blue print copies of drawings made, the use of compass, level and transit acquired. In the second term of Junior Year land and topographical surveys are made and railroad curves run.

In the first term of Senior Year a line of railroad is located and set out from a contour map previously obtained, grades and curves established and set out, and computations made. The theory of the economic location is taught by lectures and recitations in connection with the field work. The work is arranged so that each student has sufficient practice in all the various operations. The text-books used are Gillespie and Johnson's works, Henck's Field Book, Gore's Elements of Geodesy, and Merriman's Theory of Least Squares. The course is under the charge of the Professor and Instructor in Civil Engineering, aided by several assistants.

Mechanics of Engineering—Senior Year, 6 to 8 hours, both terms. The text-books of Weisbach, 1st and 2d volumes, are used in connection with lectures and solution of practical problems in illustration of the various topics. The course includes thorough instruction in the strength of materials, the stability of foundations, retaining walls, dams and embankments, and masonry arches, by lectures and graphic methods. Questions of hydraulics, water supply, and measurement of discharge, receive attention, and the theory and construction of water motors. A course in Thermodynamics with application to air and steam engine is also included.

Construction and Design—Senior Year, 6 hours both terms. A thorough course is given in the determination of stresses and the detailed design of roofs, bridges, etc., with working drawings, specifications and estimates. Visits of inspection are made, and recitations and lectures held in connection with the work in the drawing room.

Astronomy—A course is given under the charge of the Professor in Astronomy, 6 hours, second term of Senior Year, including practical work and the use of the sextant and transit in determining time, latitude, and azimuth.

Geology—This course occupies 3 hours up to the middle of the second term of Senior Year.

Mineralogy—This course, under the Instructor in Mineralogy, occupies 3 hours up to the middle of the second term in Senior Year.

A course of lectures on the theory of electricity and its applications, by the Professor of Physics, is open to students in this Department, and can be taken as a part of the preparation for a graduate course in the higher branches of electrical science.

MECHANICAL ENGINEERING—The objects aimed at in the plan of instruction in this course are, to give to the student a thorough training in elementary and advanced Mathematics and Physics, and their application to the Science of Construction; to make him familiar with the general principles of Engineering and with the practical details of mechanical construction through which these principles are made useful; and to enable him ultimately in beginning the work of his profession to bring to bear upon it a well balanced store of theoretical and practical knowledge, and a mind trained in correct habits of thought and work.

The complete course covers five years, three of which are spent in undergraduate study, and two in a graduate course, a portion of which may be spent in actual practical work. The subjects and methods of instruction in the undergraduate course are as follows:—

Mathematics—See synopsis, page 83.

French and German—Students take in the Junior year the regular studies of the Junior Class in both French and German. In the Senior year French is continued during the Winter half-term.

Surveying—A short course in Surveying comprises lectures on methods of surveying and the construction and use of instruments, also practice in field work in the use of the level and transit, city surveying, establishing grades, and laying out buildings.

Shop Visiting divides the time equally with Drawing in the Junior year until the Spring Recess. The student, accompanied by the instructor, is employed in studying machinery in use and in process of construction in different machine shops in the city. He is required to make satisfactory, carefully dimensioned sketches, from measurements taken by himself, of the complete machines and their parts, and to describe the tools and mechanical operations used in producing the simpler pieces.

Drawing—Descriptive Geometry is taught in the drawing room by lectures and recitations, and by exercises at the drawing board, where

the problems are solved graphically by the student. Instruction in *drawing Machine Elements* is given in the Junior year. Models and cartoons showing examples of approved practice are used by the instructor, who also gives personal attention to each student's work at the board as it progresses.

Principles of Mechanism—This is a course in theoretical and applied Kinematics. Instruction is by text-books and lectures illustrated by diagrams and models, an extensive collection of which belongs to the School and is accessible to the student.

Steam Engine—Recitations and lectures in this subject begin in the Junior year, after the Spring Recess. They relate to the structural details of engines and to the mechanical principles involved in their working. The subject is continued in the first term of Senior year, when particular attention is directed to various kinds of valve gear, the governor, the fly-wheel, balancing, and the effect of the weight of the reciprocating parts. In the second term of Senior year, the study of *Steam Boilers* takes the place of that of Engines.

Indicator Practice—In the Senior year the student is afforded opportunities to apply the indicator to various engines in operation, and has practice in reading indicator cards and measuring them by the planimeter. He is taught to detect such defects in the engine as are shown by the cards.

Applied Mechanics—In this course lectures, recitations, and exercises in the solution of practical problems, relate to the topics specified under this head in scheme on page 75.

Thermodynamics—Recitations and lectures on the mechanical theory of heat and its application to hot-air engines, gas engines, and the steam engine.

Machine Design—The course in this subject consists chiefly in practical exercises at the drawing board, and partly in lectures on the functions of machines and the mechanical principles which are applied in determining the proportions of machinery. The student, under the guidance of an experienced instructor, is employed in making complete working drawings of machines, many examples of which are in the drawing rooms and the basements of the school. He does not copy the examples, but is required to change the dimensions and in many cases to alter the design, and is ultimately taught to make partly new designs of important machinery, such as cranes, yacht engines, machine tools, boilers, etc. The discipline the student receives is such as he would obtain in the drawing office of an engineering establishment, while he is also carefully instructed in the theory of the subjects he deals with, and in the practical bearing of all his work.

In the Senior year several excursions are made by the class, accompanied by one or more instructors, to neighboring manufacturing and engineering centers, where large manufactories, pumping works, ocean

steamers, etc., are visited. Full notes must be taken, and a satisfactory written report upon the machinery examined is required of the student.

Thesis—Before graduating, the student must present a satisfactory thesis on some subject approved by the professor in charge of the department of Mechanical Engineering.

A course of lectures on the theory of Electricity and its applications is open to students in this department, and these lectures can be taken as a part of the preparation for a graduate course in the higher branches of electrical science.

ASTRONOMY—Students in the Select Course receive instruction in Astronomy during Junior year, first term, four hours per week.

Students of Civil Engineering during the second term of their Senior year have six recitations per week, and also practical experience in the determinations of time, azimuths, latitude, longitude, etc.

ENGLISH—The course is designed to give the student acquaintance with the great representative writers of the various epochs. A history of the language is one of the studies of the Freshman year; and after that year the study of the language is made entirely subordinate to that of the literature. During the first term of Junior year, however, extracts from Early English authors are read, and Early English grammar studied, so as to familiarize the student with the inflections then in use, and the distinctions existing between the leading dialects. It is the aim of this term's work to give such knowledge of forms, and to some extent of words, that the student will be able to read at sight any Early English author whose writings do not involve special difficulties of language or vocabulary.

With the second term the regular study of English literature proper begins with Chaucer; and for the rest of the course till the end of Senior year the following authors are read: Bacon, Shakespere, Milton, Dryden, Pope, Gray, Goldsmith, and later writers. Those mentioned in the list are always studied, but other authors not named are also taken up, the course varying somewhat in different years. In all cases complete works of a writer are studied, not extracts; as for instance several of Chaucer's Tales, and several of the plays of Shakespere. The authors are taken up in chronological order, and the literary history of the time is likewise carried on in connection with the great representative writers of each period.

GERMAN—The aim in this department is to give such a knowledge of facts and principles as shall qualify the student as rapidly as possible to use the language for such various purposes as his special needs may require, and particularly to facilitate the use of German treatises in his later special studies. To accomplish this, the course consists of the combination of the study of systematic German grammar with a complement-

ary and progressive course of oral translation from English into German, the latter being designed for the double purpose of increasing the command of grammatical principles, and through the establishment of a habit of ready and accurate expression, of laying the foundation for future colloquial use of the language. In connection with the foregoing it is attempted to introduce the student to as many different styles and as many forms of composition as the time allows. For this purpose the reading matter is in general selected from readers and collections prepared for the use of schools in Germany, and characterized by the number and variety of their extracts, thus enabling the instructor to select pieces that illustrate one another and to avoid similar lines of reading with successive classes. Constant attention is paid during a portion of the course to English affinities, to analogies in the formation of English and German abstract terms, to the commoner rhetorical resemblances and differences, to the details of arrangement in German sentences, and the development of secondary from primary significations of words.

In view of the shortness of the course there is no attempt to secure any considerable acquaintance with German literature. A body of representative pieces of lyric poetry, however, is made the basis of careful literary study, with special attention to poetic diction and variety of metrical form. Memorizing German poems is practiced to some extent as a class exercise, as also retranslation of dictated literal versions of simple pieces into German verse, in accordance with prescribed rhythm and sequence of rhyme.

Occasionally, when the proficiency of a class allows it, an advanced division is organized, which is thus enabled to read a much larger amount of matter and to pursue more critical methods. The attention of such a division is sometimes given for a few months to extracts treating leading events of German history, with a collateral course of German historical poetry, the selections being made so as to be mutually illustrative. Historical poems not contained in the text-books are often furnished by dictation.

During the last few weeks of the course, there is an attempt to initiate the student into the art of rapid and intelligent, though uncritical reading, dispensing largely with dictionary and grammar and aiming to form independent habits of observation and induction. For this purpose recourse is had to entertaining novels.

In general, it is the endeavor, while aiming primarily and constantly at acquiring a working knowledge of contemporary German, to combine habitually scientific and empirical methods, to enforce correct notions as to the nature of language, to secure incidentally some of the most important disciplinary results of elementary linguistic study, and to give some conception, by suggestive questions and occasional statements, of the various special directions which a more extended and advanced course would necessarily take.

The time allotted to the subject is three hours a week during the Freshman and Junior years.

Regular text-books: Whitney's German Grammar; Whitney's German Dictionary; Ahn's Exercises, or Eysenbach's German Exercises.

FRENCH—To avoid repetition, it will suffice to state that much the same course is pursued in French as above detailed for the German, and on like principles. The three weekly exercises extend through the entire Junior, and most of the Senior year, based on a systematic review of the essential elements as exhibited in Whitney's French Grammar, supplemented by Ahn for the more practical part. In the Junior year, a wide extent of reading is insisted on, beginning with the simpler novels, such as "Le Conscrit," "L'Ami Fritz," "La Petite Fadette," etc., through a scale of diversified vocabulary by which at last sight-reading of such matter as is more appropriate to the department may be profitably entertained. The practical or conversational course runs along parallel with the more systematic study of the language.

In the second year, the aim is to familiarize the student with practical terms and expressions of a scientific cast, rather than with the purely literary language. Hence practical works, such as books of travel and Maxime Du Camp's *Paris, ses Organes, ses Fonctions et sa Vie*, especially those chapters describing the railways, the sewers, the Seine, the street-lighting, etc., have seemed best adapted to the general object in view.

HISTORY—The greater part of the work is carried on by means of recitations, Green's *Short History of the English People* being used as a text-book. The students are also required to look up special topics, and to give the results of their studies to the class: the books used for this purpose are drawn from a small historical library in the class-room. The location of places is enforced by the use of outline maps which the students are required to fill in. Particular attention is given to the history of institutions and to the constitutional and economic growth of the country.

POLITICAL ECONOMY—In the beginning of the course an effort is made to familiarize the students with the fundamental principles of Economics and more particularly to train them in economic reasoning. More difficult problems are then taken up and discussed, and special topics are assigned to the class for investigation. A small library has been provided, which contains a number of copies of each of the principal authorities, in order that the students may be able to familiarize themselves somewhat with the literature of the subject, without expense to themselves.

THE TERMS AND VACATIONS correspond with those of the College. (See Calendar, p. 6.)

EXPENSES—The charge for tuition for undergraduate students is \$150 per year, payable \$55 at the beginning of the first and second terms, and \$40 at the middle of the second term. An additional charge of \$5 a year is made to each student for the use of the College Reading Room and Gymnasium, which is payable at the beginning of the first term, making the total charge for that term \$60. The student in the Chemical course has an additional charge of \$70 per annum for chemicals and use of apparatus. He also supplies himself at his own expense with gas, flasks, crucibles, etc., the cost of which should not exceed \$10 per term. A fee of \$5 is charged members of the Freshman Class for chemicals and materials used in their laboratory practice, and the same fee is required from all (except Chemical students) who take practical exercises in Blowpipe Analysis and Determinative Mineralogy. A fee of \$5 a term is also charged to students in the Zoological and Anatomical Laboratories, for materials and use of instruments.

For the graduate students the charge for tuition is one hundred dollars per year.

THE GRADUATION FEE in the case of BACHELORS OF PHILOSOPHY is \$10, unless the person taking the degree is also a graduate of the College, when the fee is but \$5.

SCHOLARSHIPS

STATE SCHOLARSHIPS—By an Act passed in 1863, the General Assembly of Connecticut established certain scholarships from the income of the fund derived from the National Grant of July, 1862, for the promotion of scientific education. There are now about twenty-three of these scholarships (the number depending upon the income of the fund), designed to aid by free tuition young men fitting themselves more especially for pursuits in agriculture, manufacturing, and engineering.

The applicants must be citizens of Connecticut. The appointing board consists of the Board of State Visitors (see p. 68) and the Secretary of the School; it meets on the Tuesday before Commencement (viz: on June 26, 1888), to fill the vacancies for the next University year. Applications should be made, previous to that date, to Professor George J. Brush, Secretary of the appointing Board.

THE HOLMES SCHOLARSHIP, founded by Samuel Holmes, Esq., amounts to \$60 per year. The recipients must be citizens of Middlebury, Prospect, Waterbury, or Wolcott, Connecticut; the appointments are made by the Board of Agents of the Bronson Library in Waterbury.

DEGREES

THE DEGREE OF BACHELOR OF PHILOSOPHY is conferred on those who have completed one of the three-year courses, and have passed the examination at its close.

CIVIL ENGINEER AND DYNAMIC OR MECHANICAL ENGINEER—see page 97.

DOCTOR OF PHILOSOPHY—see page 96.

COURSES OF GRADUATE INSTRUCTION

FACULTY

REV. TIMOTHY DWIGHT, D.D., LL.D., PRESIDENT

REV. NOAH PORTER, D.D., LL.D., *Professor of Moral Philosophy and Metaphysics*

ELIAS LOOMIS, LL.D., *Professor of Natural Philosophy and Astronomy*

JAMES D. DANA, PH.D., LL.D., *Professor of Geology and Mineralogy*

CHESTER S. LYMAN, M.A., *Professor of Astronomy*

REV. JAMES M. HOPPIN, D.D., *Professor of the History of Art*

EDWARD J. PHELPS, LL.D., *Professor of Law*

WILLIAM D. WHITNEY, PH.D., LL.D., *Professor of Sanskrit and Comparative Philology*

HUBERT A. NEWTON, LL.D., *Secretary, and Professor of Mathematics*

GEORGE J. BRUSH, LL.D., *Professor of Mineralogy*

SAMUEL W. JOHNSON, M.A., *Professor of Theoretical and Analytical Chemistry*

WILLIAM H. BREWER, PH.D., *Professor of Agriculture*

JOHN F. WEIR, N.A., M.A., *Professor of Painting*

JOHN E. CLARK, M.A., *Professor of Mathematics*

DANIEL C. EATON, M.A., *Professor of Botany*

ARTHUR M. WHEELER, M.A., *Professor of History*

ADDISON VAN NAME, M.A., *Instructor in Japanese*

J. WILLARD GIBBS, PH.D., *Professor of Mathematical Physics*

CHARLES B. RICHARDS, M.A., *Professor of Mechanical and Dynamical Engineering*

ARTHUR W. WRIGHT, PH.D., *Professor of Experimental Physics*

THOMAS R. LOUNSBURY, M.A., *Professor of English*

OTHNIEL C. MARSH, PH.D., LL.D., *Professor of Palaeontology*

WILLIAM I. KNAPP, PH.D., *Professor of Modern Languages*

JOHN H. NIEMEYER, M.A., *Professor of Drawing*

FRANKLIN B. DEXTER, M.A., *Professor of American History*

TRACY PECK, M.A., *Professor of Latin*

ADDISON E. VERRILL, M.A., *Professor of Zoology*
WILLIAM G. SUMNER, LL.D., *Professor of Political and Social Science*
REV. GEORGE T. LADD, D.D., *Professor of Mental and Moral Philosophy*
SIDNEY I. SMITH, M.A., *Professor of Comparative Anatomy*
WILLIAM G. MIXTER, M.A., *Professor of Chemistry*
HENRY P. WRIGHT, PH.D., *Professor of Latin*
HENRY A. BEERS, M.A., *Professor of English Literature*
A. JAY DUBOIS, PH.D., *Professor of Civil Engineering*
EDWARD S. DANA, PH.D., *Assistant Professor of Natural Philosophy*
THOMAS D. SEYMOUR, M.A., *Professor of Greek*
CHARLES S. HASTINGS, PH.D., *Professor of Physics*
WILLIAM R. HARPER, PH.D., *Professor of the Semitic Languages*
FRANK A. GOOCH, PH.D., *Professor of Chemistry*
RUSSELL H. CHITTENDEN, PH.D., *Professor of Physiological Chemistry*
HENRY W. FARNAM, R.P.D., *Professor of Political Economy*
ARTHUR T. HADLEY, M.A., *Professor of Political Science*

OTHER INSTRUCTORS

REV. GEORGE P. FISHER, D.D., LL.D., *Professor of Ecclesiastical History*
WILLIAM C. ROBINSON, LL.D., *Professor of Law*
SIMEON E. BALDWIN, M.A., *Professor of Comparative Jurisprudence*
JOHNSON T. PLATT, M.A., *Professor of General Jurisprudence*
FREDERIC R. HONEY, PH.B., *Instructor in Perspective*
JOHN P. C. FOSTER, M.D., *Instructor in Anatomy*
SAMUEL L. PENFIELD, PH.B., *Instructor in Mineralogy*
HORACE L. WELLS, PH.B., *Instructor in Analytical Chemistry*
ALFRED L. RIPLEY, B.A., *Assistant Professor of German*
EDWARD V. RAYNOLDS, D.C.L., *Lecturer on Roman and Constitutional Law*
HENRY C. WHITE, M.L., *Lecturer on Local Government*
EDWARD G. BOURNE, B.A., *Lecturer on Mediaeval History*

The instruction of graduates, independently of the courses of study provided in the professional schools, had been attempted in an informal way before 1847, when such courses were definitely arranged, and the Department of Philosophy and the Arts constituted, with this object in view. The degree of Doctor of Philosophy was first offered in 1860, that of Civil Engineer in 1860, that of Dynamical or Mechanical Engineer in 1873, and that of Master of Arts (previously given without evidence of study) in 1874.

Graduates of this and other Colleges or Universities, and (in exceptional cases, by special permission) other persons of liberal education, who are not less than eighteen years old, are received as students for longer or shorter periods, with or without reference to the attainment of a degree.

An Executive Committee has a general oversight of the students in this Department. The Committee this year is composed of Professors WHITNEY, NEWTON, BRUSH, WHEELER, and HADLEY. They receive the names of applicants for instruction, and judge and approve the courses of study proposed; and information may be obtained from them as to conditions, terms, etc. Students may also make special arrangements with any instructor according to their mutual convenience.

Instruction is given partly by lectures, partly by recitations and by oral and written discussions, partly by directing courses of reading, and partly by work in the laboratories and with instruments. There are also various voluntary associations, in which instructors and students meet together periodically for the reading of papers, oral discussions, etc.; such are, the Classical and Philological Society, the Mathematical Club, the Political Science Club, the Philosophical Club, the Semitic Club, etc.

The terms and vacations correspond with those in the Undergraduate Departments. (See Calendar, p. 6.)

The fee for instruction is generally one hundred dollars; but may be more, or less, according to the course pursued and the amount of instruction received. Students have the free use of the Library of the University (including the

Linonian and Brothers Library); and are admitted to the College Reading Room on payment of an annual fee of two dollars.

THE DEGREE OF DOCTOR OF PHILOSOPHY is conferred upon those who, after having taken a Bachelor's degree (implying a course of undergraduate study equivalent to that pursued in the Academical Department), and having studied in this Department for not less than two years, shall have passed a satisfactory final examination and presented a thesis giving evidence of high attainment in the branches of knowledge pursued. It is not given, upon examination, to those whose studies are pursued elsewhere. The requirements for it will in some cases exact of the student more than two years of labor; especially when the course of undergraduate study has been less than four years. A good knowledge of Latin, German, and French, will be required in all cases, unless, for some very exceptional reason, the candidate be excused by the Faculty. The graduating fee is ten dollars.

THE DEGREE OF MASTER OF ARTS is conferred on Bachelors of Arts of Yale College or of other Colleges, of two years' standing or upwards, who have given to the Faculty of the Academical Department evidence of having made satisfactory progress in liberal studies after receiving their first degree. Such evidence may be furnished by one year's systematic study (not professional) in New Haven, under the direction of the Academical Faculty, followed by an examination. Graduates of other Colleges can obtain the degree only by residence as thus described.

Such Bachelors of Arts *of this College* as may not choose to reside at the College for the prosecution of study may show at any time, not less than three years after graduation, by their printed essays, or by submitting to special exam-

inations, that they have spent a year in liberal (and non-professional) study, and are worthy of recommendation for this degree.

A committee of the Faculty is appointed (consisting for the present year, of Professors NEWTON and WHEELER), to whom candidates for this degree must submit their proposed courses of study for approval by the first of November in each year; and the evidence of a year's study must be submitted to the same committee by the first of June.

In the case of resident students, the charge for instruction will usually be one hundred dollars, with a fee of ten dollars for the degree. In the case of non-residents, the fee for examinations and the degree will usually be twenty-five dollars.

THE DEGREES OF CIVIL ENGINEER AND MECHANICAL (OR DYNAMICAL) ENGINEER are conferred on Bachelors of Philosophy who have taken the first degree in Engineering study, and who pursue a higher course under the direction of the Governing Board of the Sheffield Scientific School, for at least two years, sustaining a final examination, and giving evidence of their ability to design important constructions, and to make the requisite drawings and calculations. The fee for graduation is five dollars.

The Courses of Instruction may be grouped as follows:

I. INTELLECTUAL PHILOSOPHY; ETHICS

Ex-President PORTER:—*Philosophy; Ethics.* The course will include special topics in the theory of knowledge, and the relations of Science to Theism; the theory of Ethics, and the relations of Ethical to Political Science.

Professor LADD will lecture on Psychology, the Theory of Cognition, Metaphysics, and the Philosophy of Religion. This course occupies two years. The subjects for 1887-88 are taken from the Encyclopaedia of Philosophy and the Philosophy of Religion.

He will also conduct another course, consisting of lectures, text-book exercises, discussions, papers by the pupils, etc., two hours per week. This course for 1887-88 is based upon the study of Schopenhauer's "The World as Will and Idea."

During the year of 1887-88 he will also read, one hour a week, with a class of advanced students, Kant's Critique of Pure Reason—the principal aim of the study being to *interpret* the author by a critical comparison of the two editions of his work.

The undergraduate courses in Physiological Psychology and the History of Philosophy (see p. 35) are also open to graduates; and the former is especially recommended to those who wish to make a thorough study of Philosophy.

Professor HARRIS:—*The Philosophical Basis of Theism and The Self-Revelation of God.* This course of instruction for the Junior Class in the Divinity School is open to graduate students on applying to the Professor.

Professor RUSSELL will allow graduate students to attend his exercises and lectures on the Philosophy of Religion with the graduate class in the Divinity School.

II. POLITICAL AND SOCIAL SCIENCE; LAW; HISTORY

Professor SUMNER:—1. *Finance and Politics in the History of the United States.* This course deals with the history of the United States as a field for the study of currency, banking, tariff, public finance, the history of political economy, the art of politics, the science and art of government, the development of American institutions, American constitutional law, the art of legislation, industrial history, the history of public opinion, and the social development connected with the growth of the nation. It occupies two years, two hours per week. In 1887-88 the first part, down to 1830, will be given. It is assumed that those who attend this course have a good knowledge of the civil history of the United States.

2. *The Industrial Organisation of Modern Society;* two hours a week, through the year. This course is given every other year, alternately with course 3. It will not be given in 1887-88.

3. *Anthropology;* two hours a week, through the year. This course takes up the study of anthropology, sociology, archaeology, ethnology, and human palaeontology, in a very elementary manner. The ground to be covered is that embraced in Rauber's *Urgeschichte des Menschen*. The works of De Mortillet, Letourneau, and Topinard will be used as text-books, with references to those of Lubbock, Tylor, Spencer, Nadaillac, and to the publications of the American Bureau of Ethnology.

4. *The Logic and Method of the Social Sciences.* Six lectures in the first term on fallacies of method in the social sciences; the existing controversies about method; the use and misuse of history and statistics; the requirements now made of statistics and chance of their satisfaction; what history is and what its functions can be; discrimination between the categories which are historical and those which are not; the field of analysis and interpretation; the use and abuse of deduction.

Candidates for a degree are required to pursue, and to be examined on, a course of reading in the leading textbooks of Political Economy which will be prescribed by Professor Sumner for each student upon consultation.

Professor FARNAM:—*The Principles of Public Finance*; one hour a week, through the year. A systematic survey of the means by which the expenditures of government are met, regard being had both to the economic principles involved and to the fiscal systems of modern states. Leading topics are: the budget, taxation (national and local), public debts, and state banks considered as aids to public credit.

Professor HADLEY:—1. *Railroad Administration*; two hours a week, during the first term. This course deals with railroad expenditures and receipts, the methods of railroad accounting, railroad rates and discriminations and their effects upon the community, the various methods of legislative control and their results.

2. *Industrial Legislation*; one hour a week, during the second term. This course deals, in alternate years, with:

(a.) The grounds and limits of state interference with industry, the history of the right of private property, the arguments concerning private ownership of land and capital and concerning freedom of contracts.

(b.) The specific legislation of different states and countries concerning corporations and other associations, factories, transportation, and concerning public safety and health in their industrial bearings.

Section *b* was given in the spring of 1887. Section *a* will be given in 1888. Each part is so far independent of the other that it makes little difference in what order they are taken.

Mr. RAYNOLDS:—1. *Roman Law*; one hour a week, during the second term. An elementary course in the History and Institutes of Roman Law and its relation to modern Codes.

2. *Comparative Constitutional Law*; two hours a week, during the second term. A comparative study of the modern constitutional state; especially with regard to the principal forms of constitutional government, the constitution, power and relations of the govern-

mental departments, and the laws and practices of elections in the various states.

Mr. WHITE:—*Local Government in the United States*; one hour a week, during the second term. This course treats of the development and present status of the institutions of local government in this country. The legal functions of American cities, villages, counties and towns, and other municipal corporations and quasi-corporations, will be discussed and compared with the functions of the local governments of England, Germany, and France. Especial attention will be given to the practical problems of city government, and the attempts to solve them, with the results thus far attained.

Professor FISHER:—1. *Ecclesiastical History*; three hours a week, through the year. Among the topics treated are: the Establishment and Spread of Christianity, the Relations of the Church to Civil Society in the Middle Ages, the Protestant Reformation and Systems of Polity, the History of Christian Worship and Christian Doctrine.

2. *Introduction to Historical Studies*; one hour a week, during the first term. This course embraces, as special topics, the nature of historical evidence, the sources of history, its principal epochs and eras, together with comments on historical authors, ancient and modern.

Professor BREWER:—*Physical Geography in its relations to Political History*; one hour a week, during the first term. A course of about ten lectures discussing the following topics: 1. The physical relations of man to the region he inhabits; 2. The physical conditions and natural productions necessary for civilization; 3. Natural aids to the defence and protection of communities; 4. Natural facilities for commerce; 5. The effects of natural conditions now modified by modern inventions.

Professor WHEELER:—*English History*; two hours a week, through the year. This course covers two years. The object is to trace carefully the long, continuous, and, on the whole, orderly development of English political institutions. Special topics are assigned, and the best sources of information indicated. Particular attention is devoted to the early and mediaeval periods, and for these the work of Bishop Stubbs will be the leading authority. This year (1887-88) the first part of the course will be given.

Professor DEXTER:—*American History*. The instructor will meet students once or twice a week for discussions and reports on selected themes. He will also mark out and supervise courses of reading, and will direct students in the investigation of special topics and in the preparation of theses.

Mr. BOURNE:—*A View of Trade and Industry in Europe in the Middle Ages*; one hour a week, through the year. Beginning in the later days of the Roman Empire, after a hasty review of the social conditions of the time, the lecturer will discuss the development of the

various forms of industry and trade in vogue from time to time during the Middle Ages. Special attention will be given to the Levant trade, Hanseatic League, agriculture, the guilds, money, and restrictions on trade.

Professor PLATT:—*Jurisprudence*; Analysis of the general conceptions common to the legal systems of modern progressive communities.

Professor ROBINSON:—*History of Real Property*; *Canon Law*; *Parliamentary Law*.

Professor BALDWIN:—*Conflict of Laws*; *Comparative Jurisprudence*; one hour a week, through the year. The French Codes and Wharton's Private International Law are made the basis of this course; some topics of Roman Law are also taken up.

[NOTE.—The student may also avail himself, by private arrangement with the several instructors, of the opportunities furnished in the LAW SCHOOL for studies in International Law, American Constitutional Law, etc.]

III. PHILOLOGICAL SCIENCE; LITERATURE

Professor WHITNEY:—*the General Principles of Linguistic Science*; *the Comparative Philology of the Indo-European Languages*; *the Sanskrit Language*.

Professor W. R. HARPER and Mr. R. F. HARPER: *Semitic Languages and Philology*. The following courses are offered:—

I. *Hebrew*; (2) *Genesis* i-viii and, in connection with these chapters, the grammatical principles of the language; translation of Deuteronomy and Pentateuchal poetry,—two hours a week throughout the year. (2.) Critical Examination of the principal Messianic Prophecies, two hours a week throughout the year. (3) *Sight-reading* in *Samuel*, *Kings*, *Jeremiah*, etc., three hours a week throughout the year. (4) Critical study of *Proverbs*, two hours a week, first term. (5) Textual study of *Micah*, two hours a week, second term. (6) *Pentateuchal Criticism*, three hours a week, second term. (7) *Hebrew Syntax*, one hour a week, second term.

II. *Assyrian and Babylonian*; (1) The transliterated and Cuneiform texts in Lyon's Assyrian Manual, and, in connection with these, the grammatical principles of the language, two hours a week, first term. (2) Historical Texts: (a) *Tiglath Pileser*, two hours, first term; (b) *Sennacherib*, two hours, second term; (c) *Asurnasirpal*, two hours, second term; (d) *Esarhaddon*, one hour, second term. (3) Syllabaries in ii and v, Rawlinson, one hour, second term. (4) Interpretation of *New Babylonian* texts, one hour, second term.

III. *Arabic*; (1) Arabic translation of *Genesis* i-iv, selections from Kuran and the grammatical principles of the language as given in

Lansing's Arabic Manual, two hours, first term. (2) Earlier Suras of the Kuran, with a study of the rise of Mohammedanism, two hours, second term. (3) Later Suras of the Kuran, study of Arabic Syntax (Wright) with special relation to Hebrew Syntax, two hours, first term. (4) Selections from the Arabic Poets and Historians (Arnold's Chrestomathy), two hours, second term.

IV. *Aramaic*; two courses, each one hour a week. (1) Biblical and Targumic Aramaic, with Brown's Arabic Manual. (2) Syriac, with Nestle's Grammatica Syriaca.

V. *Ethiopic*. Praetorius' Ethiopische Grammatik and Dillmann's Chrestomathia Ethiopica, one hour, second term.

Professor SEYMOUR:—*Greek*. In addition to the elective courses offered in connection with the ACADEMICAL DEPARTMENT (see page 42), the following courses are provided:

I. *Greek Orators*: three hours a week through the year.

II. Critical interpretation of *Homer's Odyssey*. Two hours a week through the first term.

III. *Aeschylus*: two hours a week through the second term.

Topics for special investigation will be assigned to the graduate students in courses on page 42, as well as to those in courses II and III.

Professor PECK:—*Latin*. The elective courses open to graduate students in connection with undergraduates are given above (page 41). The instructor will also, two hours weekly, interpret the Satires of Horace and Persius during the first term, and the Epistles of Pliny during the second term. Through the second term he will also conduct weekly exercises in Latin Composition. In connection with these courses special topics will be assigned for investigation and discussion, as the Latinity of the separate authors and periods, the rationale of constructions, historical syntax, pronunciation, etymology, etc.

Mr. VANNAME:—*Elements of the Japanese Language*.

Professor BEERS:—*Anglo-Saxon; Early English*. This course includes readings in Sweet's Anglo-Saxon Reader, Skeat's edition of the Chronicles, the first part of Beowulf (Harrison's edition), and selections from Mätzner's Altenglische Sprachproben. Reference is made to Sievers' Grammar, Skeat's Etymological Dictionary, tenBrink's History of English Literature, and Earle's Handbook of Anglo-Saxon Literature.

Professor KNAPP:—*Spanish; Italian; Old French and Provençal (including Catalan, ancient and modern)*.

Assistant Professor RIPLEY:—*German*. Of the Elective courses offered to undergraduates (page 38), Nos. 25 to 29 are open to graduate students.

IV. MATHEMATICS

Professor NEWTON:—*Analytical Statics ; The Dynamics of a Particle, and of a System of Particles.*

The Mathematical Theories of Shooting Stars and Meteors, and the Treatment of Observations of them ; The Lunar and Planetary Theories. Higher Geometry.

Professor CLARK:—*Determinants, with applications.*

Theory of Curves and Surfaces.

Definite Integrals ; Differential Equations.

The Kinematics of a Rigid Body.

Professor GIBBS:—*Vector Analysis*, with especial reference to physical applications.

Theory of the Potential, and allied topics.

Mathematical Theory of Electricity and Magnetism.

Electro-magnetic Theory of Light. Propagation of the electrical disturbance in isotropic and aeolotropic media. Reflection at a surface where two such media meet. Dispersion of colors.

A short course on *The a priori Deduction of Thermodynamic Principles from the Theory of Probabilities.*

Graduates will also in many cases find it profitable to take some of the mathematical courses offered to the undergraduates. (Cf. p. 45.)

V. PHYSICS; CHEMISTRY

Professor LOOMIS:—*Meteorology*, with special reference to the laws of storms.

Professor A. W. WRIGHT:—*Experimental Physics.* Direction of practical work in the Sloane Physical Laboratory, with instruction in the principles and methods of physical investigation, the processes and instruments of measurement, and the methods of computing and reducing results of observations. Special attention is paid to practical measurements in electricity and magnetism.

The student is expected to make original investigations an important part of his work, and has the free use of the laboratory facilities for carrying them on.

Professor HASTINGS:—A course in *Physics* will consist of laboratory work, supplemented by lectures on the theory of observation, with the method of least squares, and, each year, some special department of physics will be selected for detailed treatment in a course of lectures and conferences. During 1886-87, lectures on the theory of electricity and electrical instruments occupied six months. The use of the laboratory is at the command of the student at all times.

Professor JOHNSON:—*Organic Chemistry*: Paraffines and their derivations, two hours weekly throughout the year ; Aromatic Compounds,

two hours a week during the first term. Systematic review of the various classes of carbon compounds, with study of substances that illustrate current chemical doctrines or are important in nature and in the arts. Experimental demonstrations.

Mr. H. L. WELLS:—*Analytical Chemistry*; including a systematic course in Qualitative Analysis, a systematic course in Quantitative Analysis, and such special branches of Quantitative Analysis as are applied to Mineralogy and various departments of Metallurgy.

Instruction in analytical processes and chemical principles involved in them, is given to each student separately in the laboratory. Laboratories are open seven hours daily (except Saturdays).

Professor CHITTENDEN:—*Physiological Chemistry*. Graduate students having sufficient knowledge of analytical chemistry and physiology are received into the laboratory at the beginning of the academic year, where they can pursue a course in physiological chemistry and toxicology, extending throughout the entire year. The course necessitates, on an average, four hours of laboratory work per day, and attendance on lectures and recitations three or four times per week. Opportunities are also afforded for the carrying on of original investigations, either in physiological chemistry or experimental toxicology, and to students qualified for such work the laboratory is open during the entire day.

Students desirous of studying any special subject in physiological chemistry and having but a limited amount of time are also received, provided they are qualified by previous work to pursue the study advantageously.

VI. GEOLOGY; NATURAL HISTORY

Professor J. D. DANA:—*Geology*. The subjects taught in the course are Physiographic and Lithological Geology, with Historical and Dynamical Geology in alternate years; and for an advanced elective, the reading and discussion of original memoirs and other publications in all these departments, together with work in the field. For practical illustrations of the various subjects, the instruction is supplemented by excursions to regions, severally, of sedimentary, metamorphic, and igneous rocks; of variously flexed, jointed, altered and degraded rocks; of seashore action and its results; of glacial, fluvial and other Quaternary phenomena; excellent localities for the study of these various subjects are found in the vicinity of New Haven, but excursions extend also to neighboring parts of New England and New York.

Professors BRUSH and E. S. DANA, and Mr. S. L. PENFIELD:—*Mineralogy*, in its different branches: (1) Descriptive Mineralogy: including the study of mineral species individually and in their relations to each other in composition, association, and so on. (2) Crystallography and

Optical Mineralogy: the study of the mathematical relations of the forms of crystals, the measurement of crystals on the goniometer and their practical determination; also, the study of the optical characters of the different groups of crystals, the determination of the position of the axes of light-elasticity, measurement of indices of refraction, of the optic axial angles, etc. (3) **Determinative Mineralogy and Blowpipe Analysis:** the study of the use of the blowpipe and its application to the determination of a mineral species.

Microscopical Petrography: the methods of research and the use of the microscope, the practical study of rocks in thin sections and in hand specimens.

Professor EATON:—Botany. At present there are no facilities for the profounder study of Vegetable Physiology. Structural Botany is taught in a practical way to the extent of preparing and examining microscopic specimens of the various tissues and elements found in phaeogams, and in cryptogams exclusive of fungi, including the use of the ordinary solvents, dyes, reagents, and mounting media used in this study. For the study of the North American Flora generally, and the higher orders of cryptogams, with regard to their identification and geographical distribution, the facilities are excellent, and, under proper restrictions, students may have the privilege of consulting the very extensive private collections of the professor in charge.

Professor VERRILL:—Zoology. The course includes laboratory practice, recitations, readings, and lectures. The laboratory work is varied according to circumstances, in order to accommodate, so far as possible, those students who may wish to pursue special branches. A large part of the time is usually devoted to Comparative Anatomy, Morphology, and Systematic Zoology. Ample collections in the Peabody Museum, representing all classes of animals, are available for instruction, while the proximity to the sea renders it easy to provide fresh or living examples of most classes of marine animals for study and dissection.

All students in this course should be familiar with the use of the microscope. A knowledge of drawing sufficient to enable the student to make sketches of the objects studied is very desirable.

Professor S. I. SMITH:—Elementary Anatomy and Histology; two to four half-days a week during the first term. Laboratory instruction will be given with special reference to preparation for medical studies, or as a preparation for further biological study and investigation. The instruction will be adapted as far as possible to the special wants of the individual student.

During the last part of the second term, graduate or special students who desire to do so may attend the short course of lectures on embryology, with special reference to human morphology given to undergraduates in the course in biology (see above, p. 77).

VII. APPLIED SCIENCE

Professor LYMAN:—*Practical Astronomy*. Instruction, especially adapted to candidates for the degree of Civil Engineer, is given in practical Astronomy applied to Geodesy, using as guides the treatises of Loomis and Doolittle. The practical instruction embraces the use

(1) Of the Theodolite or Surveyor's Transit for determining time, latitude, and azimuth;

(2) Of the Sextant and Reflecting Circle for time, latitude, and longitude;

(3) Of the combined Portable Transit instrument and Zenith Telescope for time, latitude by Talcott's and other methods, longitude by moon culminations, etc. The instrument used is of three-foot focus and 2.6 inches aperture, with fine alidade level and position filar micrometer.

(4) The Meridian Circle (with five-foot telescope) is also available for transit and other observations, as well as the Clark Equatorial of nine inches aperture, and a five-foot portable telescope by Clark, for occultations and other work.

Special students in Practical Astronomy are permitted to take up such branches of the subject, with the use of any of the above-mentioned instruments, as may best suit their purposes.

The time devoted to the subject will vary with the taste and purpose of each student and the time at his disposal. But for the degree of Civil Engineer, a good familiarity with the instruments named in 1, 2, and 3, as well as with the corresponding computations and practical problems, is required.

Professor JOHNSON:—*Agricultural Chemistry*; two hours a week, through the year. This course includes the following topics: the Atmosphere, Water and Soil in their various relations to Vegetation; Tillage; Fertilizers; Rotation of Crops; Irrigation.

Professor C. B. RICHARDS:—*Mechanical Engineering*. This course, arranged for candidates for the degree of Mechanical (or Dynamical) Engineer, is also open to Special Graduate Students, who will be allowed in certain cases to take selected parts. The leading topics are:

(1) *Applied Mechanics*; including graphical methods in applied kinematics, and in the investigation of mechanisms working with friction; graphical determinations of the accelerations of the moving parts of machines; the strength of materials as effecting the proportions of machine elements; the applications of the principles of hydraulics to the construction and working of turbines and pumps.

(2) *Thermo-dynamics*; applications to the compound steam engine, air compressors and compressed air motors, engines worked by volatile vapors, refrigerating machines, the warming and ventilation of other things.

(3) *Machine Design* ; in this course the student is engaged in practical exercises under the guidance of the professor in charge, investigating machinery, and designing and making working drawings, specifications, and estimates for machines and manufacturing plant. In addition to the study of machines in general, either of the following subjects will at the option of the student receive particular attention ; (a) Marine Engineering ; (b) Railway machinery ; (c) Pumping machinery and plant ; (d) Machinery and plant for manufacturing. The student is required to make complete drawings, from new designs, of at least one important piece of machinery under one of these subjects. A compound marine engine and boilers, a locomotive, a turbine, driving centrifugal pumps, a blowing engine for an iron furnace, are examples.

Candidates for the degree of Mechanical Engineer are required to take also a selected course in Mathematics, to sustain a final examination, and to present a satisfactory thesis on a subject approved by the professor in charge of the course.

A course in applied electricity, and, when the facilities in the physical laboratory permit, a course of laboratory work under the superintendence of the professor in charge ; also, lectures on Industrial Legislation and Finance, and lectures on the higher Mathematics, are open to all students in this course.

Professor DuBois :—*Civil Engineering*. This course offers instruction for advanced graduate students, as well as for those students who may be regular candidates for the degree of Civil Engineer. It embraces the following topics :

(1) *Mechanics applied to Engineering* ; including a course in Hydraulics, with reference to the various problems which arise in connection with water-supply, water-power or irrigation ; the efflux of water, flow through orifices and mouthpieces and over weirs, simple and submerged ; questions of overflow and land damage ; the effect of friction, contraction, enlargement, bends, valves, etc. ; measurement of the discharge of pipes, rivers and streams ; the theory and design of water-motors ; a course in Thermo-dynamics and its practical application to hot-air, gas and steam engines, and the heating and ventilation of buildings.

(2) *Surveys and Geodesy* ; including methods of observation, base measurements, triangulation field work, theory of least squares, adjustment of observations, calculation of the triangulation, and computation of geodetic latitudes, longitudes, and azimuths.

(3) *Construction and Design* ; including the strength and properties of materials, construction and design of bridges, roofs, foundations, retaining walls, dams and embankments, masonry, arches, sewerage and drainage, improvement of rivers and harbors, specifications and contracts, and the preparation of designs and working drawings.

Candidates for the degree of Civil Engineer are required to take, in addition, a selected course in Mathematics, Practical Astronomy, and when the facilities in the physical laboratory permit, a course of laboratory work, under the superintendence of the professors in charge. They are also required to sustain a final examination, and to present a satisfactory thesis accompanied by appropriate designs, upon a subject approved by the professor in charge of the course.

To special students, not candidates for the degree of Civil Engineer, a selection of special topics is allowed. The lectures of the Department upon Railroad Administration, Industrial Legislation and Finance, and upon the higher Mathematics are open to all the students in this course.

VIII. FINE ARTS

For the instruction offered in the Fine Arts, see page 109.

SCHOOL OF THE FINE ARTS

COUNCIL

The Council of the School consists of the President of the University, the permanent officers of the School, and four members by election : Donald G. Mitchell, LL.D., Edward E. Salisbury, LL.D., J. Davenport Wheeler, Ph.B., and William W. Farnam, M.A.

FACULTY

Rev. TIMOTHY DWIGHT, D.D., LL.D., PRESIDENT

JOHN F. WEIR, N.A., M.A., *Director, and Professor of Painting*

Rev. JAMES M. HOPPIN, D.D., *Professor of the History of Art*

JOHN H. NIEMEYER, M.A., *Professor of Drawing*

FREDERIC R. HONEY, Ph.B., *Instructor in Perspective*

JOHN P. C. FOSTER, M.D., *Instructor in Anatomy*

—————, *Instructor in Architecture*

BELA L. PRATT, *Librarian*

ORGANIZATION AND COURSE OF STUDY

The School aims to provide thorough technical instruction in the Arts of Design, viz : Drawing, Painting, Sculpture, Architecture, and Copperplate Etching ; and to afford a knowledge of such branches of learning as relate to the Philosophy, History, and Criticism of Art. As a professional School of Art it aims to furnish a thorough course of study in the practice of the studios ; and as a department of the University it aims to provide instruction in Art as a constituent part of the scheme of general culture. These departments, of Practice and Criticism, may be regarded as distinct or correlative.

THE TECHNICAL COURSE

The technical instruction, for professional students, is based upon methods well adapted to discipline the æsthetic faculties and ground the pupil in the elements, or fundamental principles, which constitute the grammar of Art, as a foundation for all forms of special application. This instruction is arranged as follows :

IN DRAWING, the work is distributed over a three years' course. During the first year the practice of the studio is confined to drawing from the "Antique"—from plaster casts ; during the second year, to drawing from casts and the living-model ; and during the third year, to drawing from the living-model—nude and draped. The classes under the supervision of the Instructor in this department are the antique portrait, nude-model, sketching, and composition classes ; and until the Chairs of Sculpture and Copper-plate Etching are filled, these branches are included under the same supervision. Students showing the requisite proficiency in any class, will be advanced to the work of the second or third year according to individual ability. Instruction in this department precedes all special courses in the various branches of Art ; no pupil is allowed to enter any of the advanced classes without this necessary qualification in that degree of proficiency which is deemed essential as a preliminary ground for such studies. Lectures on the principles of decoration, as applied in the various branches of Decorative Art, are included in this department ; and a special course in "free-hand drawing" is arranged to meet the requirements of students in the Sheffield Scientific School, extending through the first term of the year.

IN ANATOMY, instruction is given in the form of lectures, and by drawings made from specimens and casts. The lectures are divided into two courses, for elementary and advanced classes. Each course consists of twenty lectures, one lecture a week to each class, continuing through the Winter and Spring Terms. The elementary course is devoted to the study of such portions of the human body as manifestly affect the external forms, the aim being to familiarize the pupil with the characteristics of those parts, independently of their combined action in modifying the external forms. Drawings of these parts are made by the pupils, in connection with the subjects discussed by the lecturer. The advanced course includes the whole structure of the human form in its plastic anatomy and mechanism. The skeleton and muscular system are viewed as a whole, and the modification of the external forms studied in action and repose. The subjects of proportion, equipoise and motion, and expression, are studied, and original drawings

required in illustration, made from life, or from Greek sculptures, by reducing the same to their anatomical structure by the imagined removal of the integument.

IN PERSPECTIVE, the instruction is likewise given in the form of lectures, divided into two courses of twenty lectures each, for an elementary and an advanced class, illustrated by examples drawn on the black-board, illustrating the principles under discussion. The lectures are supplemented by practical exercises. The student is required to work out examples in the interim between the lectures. The elementary course includes the principles of plane geometry underlying perspective,—simple projections, or plan and elevation drawings. Objects are treated with reference to their true dimensions, as preliminary to their correct representation on a flat surface, as seen in perspective, at various distances, and from different points of view. The advanced course includes the study of shadows and reflections, and the application of the general principles of perspective to interior and exterior views. The pupil is required to work out problems in illustration of all the principles involved in linear perspective in its application to the various branches of art.

IN PAINTING, the work is divided into an elementary and an advanced course of study. The first studies are devoted to the acquisition of a knowledge of the elements of technical practice, by painting from still-life. When the pupil has acquired some knowledge of the means in representing objects in color, as to the values and relations, the remainder of the course is given to studies of the living-model, in portrait, figure, and composition. This is continued while the pupil remains in the School. The course in painting implies, on the part of the pupil, a requisite knowledge of drawing, and drawing from the living-model is continued throughout the course in connection with the work in color. The practice of the studio is supplemented by illustrated lectures on Color, Chiaroscuro, Composition, and such other special topics as relate to the principles and means of Art, or are comprehended in its theory and practice.

IN MODELING, a course is provided, including the anatomical lectures, and drawing. The work in this branch of instruction consists in first modeling in clay, from casts of Greek fragments, the head and other extremities of the human form, and then the whole figure. When the student has sufficient command of the method and means, the rest of the course is devoted to modeling from the living subject.

IN ARCHITECTURE, the course includes drawing, as provided in that special department in its elementary instruction, as well as the course in isometric projection and perspective. Under the instructor in Architecture studies are made from notable examples of the various orders

and styles, in chronological order, with original projects in illustration to be worked out by the student. The means and methods of preparing plans, elevations, sectional and working drawings, and perspective views in india-ink and water-color, are comprehended in the elementary part of this course. Arrangements may be made with other departments of the University, by which students in Architecture can obtain the requisite instruction in mathematical subjects having a direct bearing on this art, including plane geometry, stone-cutting, the nature and strength of materials, and the principles of construction and engineering.

Under the instructor in Architecture the course includes a general and comprehensive view of the historic development of the various architectures, with a comparative analysis of the same with respect to their principles of construction and decoration.

IN COPPER-PLATE ETCHING, a course is provided, and a room set apart for this special study, containing all the necessary appliances of this art, including a press. The instruction in this branch of art is, for the present, in charge of the Professor of Drawing.

COURSE IN THE HISTORY AND CRITICISM OF ART

The instruction in this department includes courses of lectures by the various Instructors of the School, arranged to include both professional students in regular course, and classes from other departments of the University where it is recognized as an "elective" study.

IN THE HISTORY OF ART, the course is as follows: 1. The *Origin of the Art* principle—Hegel, Lotze, Ruskin; 2. *Egyptian Art*—Perrot and Chipiez, "*Histoire de l'Art de l'Antiquité*," etc.; 3. *Oriental Art*, with special reference to its influence on Greek Art—Schnaase, Fergusson, Perrot and Chipiez, etc.; 4. *Greek Art*, Principles of Greek Art; Pelasgic construction, and the three orders of Greek Architecture; Greek Sculpture, including the Archaic, Phidian, and Naturalistic periods, and the Graeco-Roman; with recent researches at Olympia and other places; *Greek Painting*, Ceramic, Mosaic, and Mural—Winckelmann, Lessing, Ottfried Müller, J. Overbeck, Schnaase, Friedrichs, Charles Blanc, and Woltmann; 5. *Roman Art*—Fergusson, Dennis, Emil Braun, etc.; 6. *Beginnings of Christian Art*, classic sources and types; Religious Art; early Christian Painting and Iconography; early Christian Architecture—Lindsay, Fergusson, etc.; 7. *Bysantine Art*, Oriental, Christian, and Saracenic forms—Fergusson, Ruskin, etc.; 8. *Mediaeval Art*, Romanesque and Lombardic; Tuscan, Southern and Northern Gothic—Viollet-Le-Duc, Ruskin, Fergusson, etc.; 9. *The Renaissance*; rise of the Florentine School, and the Schools of Sienna, Umbria, Lombardy, Rome, and Venice

—Vasari, Lanzi, Kugler, Ruskin, Crowe and Cavalcaselle, Symonds, etc.; 10. *Modern Art*—Schools of Spain, Holland, Germany, France, and England; the Pre-Raphaelite, Romantic, and Impressionist movements; Art in America. The lectures are illustrated by means of the hydro-oxygen lantern.

IN THE PRINCIPLES AND MEANS OF ART, a course of twelve lectures is provided, fully illustrated, embracing the subjects of Line, Chiaroscuro, Color, Composition, and Expression,—following the path of the artist in his work. A course of twelve lectures discussing the technical methods of the Painter, the Sculptor, the Architect, and the Engraver, including an historic account of the technical development of these arts, is also provided.

The regular prescribed course of study, for professional students, covers a period of three years, but pupils are encouraged to remain in the School and pursue advanced studies after the expiration of the prescribed term. The fees are at the rate of twelve dollars per month, with an annual fee of five dollars. No pupil is received for a term of less than three months. The tuition fee for a fourth year's attendance is one-half the usual rate; pupils remaining for a longer period are classed as "honorary students"; as such they are exempt from the payment of a tuition fee, but are charged an annual fee of ten dollars. The School is open to both sexes; no pupil is received under fifteen years of age. All applications for admission should be made through the Director. The School opens on the 1st of October, and closes on the 1st of June. At the end of the School-year an exhibition of the work of the various classes of pupils is held, continuing open through the summer months. The closing exercises are held on the 1st of June.

CERTIFICATES are awarded to pupils remaining in the School through the regular course of three years; and a DIPLOMA is awarded, on the ground of merit alone, to such students as fulfill all the requirements of a prescribed course of advanced studies in the several departments of instruction.

The "ETHEL CHILDE WALKER PRIZE," the income from a foundation of two hundred dollars, is awarded annually, under certain restrictions, to the most deserving pupil in the professional department.

THE ART LIBRARY, containing a collection of technical hand-books, current art-periodicals, and portfolios of engravings, is open, during specified hours, for the use of students. The pupils of the School are entitled to the use of the University Library, and to such other privileges, under the usual restrictions, as are granted to students in the other Departments.

Season-tickets, at fifty cents each, admitting the holder to the Galleries and Exhibitions throughout the year, are furnished to the undergraduates of all Departments of the University.

THE COLLECTIONS embrace "The Jarves Gallery of Italian Art," numbering one hundred and twenty-two paintings dating from the 11th to the 17th centuries; the "Trumbull Gallery" of historical portraits and other works, numbering fifty-four pictures; a collection of contemporaneous art, numbering about one hundred paintings; a collection of about one hundred and fifty casts and marbles, representative of the various periods of Greek and Renaissance Art; a collection of old Dutch and Flemish paintings, numbering one hundred and sixty-five original works, loaned by Mr. Louis R. Ehrich; a valuable collection of Chinese porcelains and bronzes, loaned by Mr. F. W. Williams; and a series of very valuable Belgian wood-carvings of the 16th century, deposited in the School by Mrs. A. C. Alden. The Collections are open daily for the use of students; and to the public, during the winter, from 1 to 5 P. M., and during the summer from 9 A. M. to 6 P. M.

The Art Building was erected in 1864, by Mr. Augustus R. Street (Yale College 1812), of New Haven, at a cost of about \$220,000. The School was partially endowed, to the extent of \$81,500, by Mrs. Street, who also made other gifts in aid of its objects.

DEPARTMENT OF THEOLOGY

(YALE DIVINITY SCHOOL)

FACULTY

- REV. TIMOTHY DWIGHT, D.D., LL.D., PRESIDENT
REV. GEORGE E. DAY, D.D., *Professor of the Hebrew Language and Literature and Biblical Theology (Old Testament)*
REV. SAMUEL HARRIS, D.D., LL.D., *Professor of Systematic Theology*
REV. GEORGE P. FISHER, D.D., LL.D., *Professor of Ecclesiastical History*
REV. LEWIS O. BRASTOW, D.D., *Professor of Homiletics and the Pastoral Charge*
REV. JOHN E. RUSSELL, M.A., B.D., *Professor of Biblical Theology (New Testament)*
REV. GEORGE B. STEVENS, PH.D., D.D., *Professor of New Testament Criticism and Interpretation*
-

- MARK BAILEY, M.A., *Instructor in Elocution*
GOTTLIEB HENESS, M.A., *Instructor in German*
WILLIAM R. HARPER, PH.D. (*Professor of the Semitic Languages*), *Instructor in Hebrew*

SPECIAL LECTURERS

- REV. HENRY CLAY TRUMBULL, D.D., LYMAN BEECHER LECTURER, *on the Sunday School; its Nature, Mission, Methods, and Auxiliaries*
REV. JOHN HALL, D.D., LL.D., *subject to be announced*
REV. WILLIAM E. GRIFFIS, D.D., *on The New Japan*
PROF. LEONARD J. SANFORD, M.D. *on the Preservation of Health*
-

THE CONDITIONS OF ADMISSION to this Department are membership in some evangelical church, or other satisfactory evidence of Christian character, and a liberal education at some College or University, or, in exceptional cases, an equivalent preparation for theological studies. Students of every Christian denomination, in case they are possessed of these qualifications, are admitted.

It is expected that every student will be promptly on the ground at the beginning of the session. Rooms are assigned in the order of application, but no room is reserved for any applicant who neglects to appear, beyond one week after the opening of the term.

THE REGULAR COURSE OF INSTRUCTION occupies three years, and is arranged in the following order :

JUNIOR YEAR :

Professor DAY will lecture once a week on the Encyclopedia and Literature of Theology, including a survey of the various branches of Biblical Literature, and an account, more or less extended, of the prominent writers and their works in the several departments of theological science. He will also read with the class, in the latter part of the year, portions of Delitzsch's Hebrew translation of the New Testament, as compared with the original Greek and the English and Continental Revised Versions.

Professor HARPER will give instruction in the grammatical principles of the Hebrew language, in connection with the first eight chapters of Genesis; translation of these chapters from English into Hebrew and the acquisition of a vocabulary in the ground covered in his *Introductory Hebrew Method*, with a survey of the Pentateuchal criticism; rapid reading of Exodus i—xx, and Deuteronomy; translation at sight of the First Book of Samuel and a critical reading of Genesis xlix, Exodus xv, and Deuteronomy xxxii, xxxiii; Hebrew Syntax. Provision will also be made for the instruction of an advanced class in Hebrew.

Professor STEVENS will lecture four times a week on the Synoptic Gospels. The work will be conducted on the basis of Mark, but the parallel passages will also be read in the class and critically examined. It is designed to make this course a thorough study of the Life of Christ, with special reference to the successive stages of his teaching. Recitations will also be held in connection with the lectures, in which the members of the class will be examined upon the passages read. During a portion of the year lectures will be given on the General Introduction to the New Testament, including the principles of Textual Criticism, and on the Special Introduction to the Synoptic Gospels, including the problems of their origin and relation. Essays on themes connected with critical New Testament study will be presented by the students and discussed in the presence of the class.

President DWIGHT will lecture twice a week on the First Epistle to the Corinthians.

Professor HARRIS will lecture twice a week on the Philosophical Basis of Theism, on Natural Theology, the Evidences of Christianity,

and the Inspiration of the Scriptures ; also, as incidental to these topics, on the various forms of Skepticism.

Professor FISHER will deliver a series of lectures during the latter part of the term on Ancient History. These lectures will include a discussion of the literature on the subject, as an aid to the student in pursuing historical studies by himself. They are intended to serve the purpose of an introduction to the History of the Church.

MIDDLE YEAR :

Professor HARRIS will lecture five times a week on Systematic Theology. This course will include a full and systematic investigation of the doctrines of Christianity, and of existing questions and controversies concerning them. The subjects will be treated in the following order: The Attributes of God ; The Trinity ; God the Creator, and his End in Creation ; God's Providential Government ; God's Moral Government ; Sin ; Redemption—the Atonement, Regeneration, Justification by Faith, the Spiritual Life ; the Kingdom of Christ on Earth, its Progress and Triumph ; Eschatology. Examinations on the topics discussed will be connected with the lectures, and entire freedom of question and discussion at every lecture is invited.

Professor DAY will give instruction twice a week in Old Testament Biblical Theology, with special reference to the progressive stages of Divine revelation, as connected with the history and religious institutions of the people of Israel, prophecy, and the wisdom of the Hebrews. He will also lecture once a week on portions of the poetical books of the Hebrew Scriptures, and will give instruction in Chaldee to such members of the class as may desire it.

Professor FISHER will give instruction three times a week on General Church History, embracing specially the branches of the subject which are not included under the History of Doctrine. They comprise the following topics: The Nature, Divisions, and Sources of Church History, with a Review of the Literature on the subject ; the Old or Preparatory Dispensation in its relation to Christianity ; the condition of the Græco-Roman World at the Introduction of the Gospel ; the Establishment of Christianity and the Conflicts of the Apostolic Age ; the spread of Christianity, including especially the Conversion of the Roman Empire and of the Teutonic Nations ; the Changes in Ecclesiastical Polity in the Early Centuries ; the Organization of Latin Christianity under the Papacy ; the Relations of the Papacy and the Church to Civil Society in the Middle Ages ; the Protestant Reformation, with its Causes, and the Systems of Polity adopted by the different Protestant Churches ; Christian Life, and its Characteristic Features in the Successive Eras (including the Rise and Subsequent History of Monasticism) ; the History of Christian Worship.

Professor STEVENS will lecture twice a week on parts of the New Testament, selected with special reference to exhibiting the form and content of the Apostolic Teaching. The subjects for the current year are: The Apostolic Discourses in the Acts and the Epistle to the Romans.

Professor BRASTOW will give instruction twice a week, by lectures and critical exercises, in the principles of Rhetoric as applied to the work of Christian preaching, with special reference to the cultivation of an appropriate pulpit style.

SENIOR YEAR :

Professor BRASTOW will give instruction four times a week, by lectures and critical exercises, in different branches of Practical Theology, as follows: he will lecture once a week on Homiletics, and once a week will conduct a class exercise in the criticism of sermons and plans of sermons. It is proposed to make these practical exercises a prominent feature in the course. He will, also, give private instruction at least twice during the year, to each member of the class in connection with the criticism of sermons, and will give personal aid in the study of Homiletical and General Literature. He will lecture twice a week upon Pastoral Theology, including the calling, training, and personal and official duties of the Christian ministry, with special reference to the leadership of the church in its various practical activities as connected with the interests of the Kingdom of God. He will also conduct class discussions of questions of practical interest relating to the work of the church.

Professor FISHER will lecture three times a week, through the year, on the History of Christian Doctrine and on Symbolical Theology. The course includes an explanation of the Origin of Theology as a Science, and a Discussion of True and False Theories of the Development of Doctrine; a Survey of the Influence of Philosophy on Theology in the Successive Eras; a Review of Authors in the field of Theological Literature; a History of Theological Thought in the Church, in relation to the several Doctrines of the Christian system, down to the present time; an account of the Comparative Tenets of the different religious bodies into which Christendom is divided.

Professor RUSSELL will give instruction three times a week in the Biblical Theology of the New Testament. It is the aim of this department to investigate the teaching of the New Testament in the character and historical connection in which that teaching is found in the writings of the New Testament. The lectures embrace the following topics: Biblical Theology as a science and its relation to other branches of Theology; the principal forms of teaching exhibited in the New Testament; their differences and relationships; the historic connection of

New Testament Theology with the Religion of the Old Testament and with the religious ideas of the later Judaism.

Professor DAY will lecture once a week on portions of the prophetic books of the Old Testament, and will read with those who wish to prosecute the study of Syriac, the Peshito version of the New Testament.

Professor STEVENS will read with the class once a week the shorter Epistles of Paul with discussion of their place in the Apostle's Life and Labors.

GRADUATE OR FOURTH YEAR CLASS:

Into this class, which was established in 1879, only those who have completed a three years' course in this or some other Theological School, can be admitted. It is designed to meet the wants of those who desire to pursue an advanced course of general theological study, or to apply themselves to special subjects of reading or investigation in any of the departments of theology, for one year or more, under the advice and direction of the Professors and with the helps furnished by the Reference and University libraries.

For the present year, the following are the subjects, selected after conference between them and the Professors, to which the whole class, or portions of it, attend. Individual members of the class pursue other branches of theological study by private arrangement with the Professors.

- I. PRESIDENT DWIGHT: The leading Apostles and their thoughts.
- II. EX-PRESIDENT PORTER: Special Topics in Philosophy and Philosophical Theology.
- III. PROFESSOR DAY: Delitzsch on the Psalms compared with the Modern Revised Versions.
- IV. PROFESSOR HARRIS: Reading of Dorner's System of Christian Doctrine.
- V. PROFESSOR FISHER: Weiss's Life of Jesus, read and discussed.
- VI. PROFESSOR BRASTOW: Schools of Preaching and the History of Preaching; with critical exercises and discussions.
- VII. PROFESSOR RUSSELL: The Philosophy of Religion.
- VIII. PROFESSOR STEVENS: Müller on the Christian Doctrine of Sin.

OPTIONAL STUDIES IN EITHER YEAR:

Professor HARPER will admit students who desire to pursue the study of Arabic or Assyrian into his graduate classes, free of charge.

Professor DAY will read with those students who desire to become familiar with the theological literature of Germany and have made sufficient progress in the language, some standard work in German on Christian doctrine, with critical remarks and references to the ablest works on special topics.

Professor WHITNEY will give instruction to those who desire it, in Sanskrit.

Dr. HENESS will give instruction, free of charge, to students who wish to learn to speak German.

Instruction in Vocal Music will be given during a portion of the year to students who desire it, by Dr. STÖCKEL, the Instructor in Music in the University.

Professor LADD's University Course on Psychology, Metaphysics, the Theory of Cognition, and the Philosophy of Religion, is particularly intended to meet the wants of Theological Students. A select number of advanced pupils in Philosophy will also be admitted to his other Graduate Courses. (See p. 98.)

The members of the Divinity School, on conditions prescribed by the Faculty, are also allowed to attend, free of expense, any of the lectures in the COLLEGE, and also in the SHEFFIELD SCIENTIFIC SCHOOL, many of which are on subjects of special importance to pastors. These lectures are on the following subjects: *Moral Philosophy*, by Ex-President PORTER; *Intellectual Philosophy*, by Professor LADD; *History*, by Professor WHEELER; *Evolution and Cosmogony*, by Professor DANA; *Anatomy*, by Professor SANFORD; *Language*, by Professor WHITNEY; *Physical Geography*, by Professor BREWER; *Agricultural Chemistry*, by Professor JOHNSON; *Practical Agriculture*, by Professor BREWER; *Botany*, by Professor EATON; *Zoology and Entomology*, by Professor VERRILL.

Those who intend to become Foreign Missionaries have the further privilege of attending the lectures in the Medical School, on the payment of the matriculation fee of five dollars.

These opportunities for obtaining wider culture will be of special value to graduates of colleges and others who desire the means of pursuing studies to which they have not attended, or in which they seek further instruction.

ELOCUTION :

A thorough course of instruction in Elocution is given to the students, which is progressive in its character and extends through the three years of study for each class.

To the Junior Class a full course of lectures is given on the principles of logical and emotional analysis and expression, and on oratorical action and vocal culture. This is followed by individual practice in speaking and reading.

In the Middle year is added extended and frequent special practice in Scripture and hymn reading and the reading and delivery of sermons.

To the Senior Class the instruction is given mainly in private lessons, and is designed to meet, so far as possible, the special needs of each individual in his preparation for the duties of the preacher's office.

EXERCISES IN PUBLIC SPEAKING :

There will be an exercise for all the classes in the MARQUAND CHAPEL, under the direction of Professor BRASTOW and in the presence of the Faculty, once in two weeks, in the reading of the Scriptures and hymns, and in the delivery of sermons, or parts of sermons or addresses. Every alternate week there will be an exercise, designed to cultivate the power of the students in *extemporaneous speaking*, by the discussion of subjects of practical importance. Weekly debates are also held by the students in societies of their own.

LICENSE TO PREACH

The regular time for applying for license is at the close of the second year's study, before which time the members of the Seminary are not allowed to preach.

PUBLIC WORSHIP

Prayers, with reading of the Scriptures and singing, are attended every morning in the MARQUAND Chapel. It is optional with each student whether to attend worship on the Lord's day in the University Chapel, or in one of the City Churches; but whatever may be his decision, it is hoped that he will engage, so far as may not be inconsistent with the prosecution of his studies, in some form of City-Mission, Sabbath-School, or other benevolent labor, for which constant opportunities are offered.

DEGREE

The Degree of Bachelor of Divinity is conferred on all members of the Department who at the end of the Senior year pass the prescribed examination, and present an approved thesis on some topic of theology.

LIBRARIES

The *University Library*, containing about 135,000 volumes in the various departments of literature and science, is especially rich in its theological part, and stands in this respect among the first libraries in the country. It is open five hours on every secular day for consultation and for the drawing of books. The Divinity students in common with the other members of the University have access to it without charge.

For a fuller notice of the advantages offered in this direction, the account of the Library, on a later page of the Catalogue, may be consulted.

The *Reference Library* of the Divinity School, established by the late Henry Trowbridge, Esq., of New Haven, and now placed in the Bacon Memorial Hall, erected in 1882 by the late Frederick Marquand, Esq., as a memorial of the late Rev. Leonard Bacon, D.D., is open for consultation during several hours of the day. It contains nearly 3,000 carefully selected volumes, in every department of theological literature, and is designed to take the place, for each student, of a large and well selected private library. The latest books and periodicals are constantly added to it as they appear.

The valuable *Library of Church Music* belonging to the late Dr. Lowell Mason, was given to the Seminary by his family. This library, which is one of the largest of its kind in the country, is placed in one of the rooms in the West Divinity Hall.

The united Libraries of the College Literary Societies, containing nearly 30,000 volumes in general literature, are accessible to theological students.

The total number of volumes in the several libraries, which are open to students, is about 170,000.

PHYSICAL EXERCISE

The College Gymnasium is open to the students of this Department at a small charge. The facilities offered in this connection are described on page 56.

DIVINITY HALLS

The East Divinity Hall, which was erected in 1870, contains in addition to the Lecture Rooms for the three classes and rooms for the Professors, accommodations for about sixty students. The West Divinity Hall (parallel with the other building and adjacent to it) was erected in 1874, and has, in addition to the room containing the Lowell Mason Library, accommodations for ninety students. The rooms in these buildings are warmed by steam, and lighted by gas, and are provided with all furniture (except bed-clothes), which may be necessary for the occupants. They will be assigned to new students in the order of their application. A few of the rooms have two bedrooms attached to them, but, in general, provision is made for each student to room alone, and all students who desire it can have this privilege.

EXPENSES AND PECUNIARY AID

Students have only to make pecuniary provision for about eight months of study annually. In the four months of vacation, from May to September, they have the opportunity to engage in Home Missionary or other labor, with remuneration for their services.

The expenses for the annual session of 35 weeks are \$10 for each student for care of room and other incidental expenses; \$25 to \$30 for fuel and lights, or one-half of this sum in case two students occupy the same room. No charge is made for instruction or room rent, or for the use of Libraries.

The expense for board will be from \$3.25 to \$3.50 a week, at which prices most of the students have obtained good board during the past year.

Students in the Junior, Middle, and Senior Classes, whose circumstances require it, will receive \$100 a year from the income of Scholarships and other funds belonging to the School. Additional aid to the amount of \$75 annually, is offered by the American College and Education

Society to its beneficiaries. These means of assistance cover all the expenses mentioned above.

Members of the Graduate or Fourth Year Class will be furnished with rooms free of rent, and no charge will be made for instruction or the use of Libraries.

The Scholarships belonging to the Department bear respectively the names of James Hillhouse, William Leffingwell, George E. Dunham, Normand Smith, E. E. Salisbury, Thomas R. Trowbridge, Charles Atwater, Richard Borden, Susan B. Dwight, Samuel Holmes, Charles Nichols, Noah Porter, John DeForest, James Dwight, J. B. Beadle, David Root, Rebecca Breed, Mary Goodman, Orin Fowler, Edward Bull, W. W. Seymour, William S. Eakin, Cassius Welles and Robert McEwen.

After the close of the second year in May, students have opportunities to receive remuneration for preaching in the neighboring churches.

In general, it may be said that the aid which is provided for every young man, of any evangelical denomination, who gives promise of usefulness in the ministry, is sufficient, in connection with his own efforts, to enable him to complete a course of theological study.

GRADUATE FELLOWSHIPS

A GRADUATE SCHOLARSHIP OR FELLOWSHIP was established in this Department, in 1876, as a memorial of the late Mrs. Aurelia D. Hooker, of New Haven. It is assigned at graduation to that member of the class to which it is offered who, having been connected with the School through the entire course and being of approved Christian character, has in the judgment of the Faculty made such proficiency in theological studies as best to qualify him for the advantages offered by this foundation for the further prosecution of the same. The person to whom the scholarship is given receives the annual income (\$700) for two years after graduation, and is expected to pursue a course of theological study under the direction of the Faculty,

either as a resident at the School, or, in case he may prefer to do so, in Europe or Palestine. THE HOOKER FELLOWSHIP was offered to the class which entered the Divinity School in September, 1886, and is also offered to the class which will enter in September, 1888.

A SIMILAR GRADUATE FELLOWSHIP yielding \$500, and affording to the student who shall receive the same privileges for one year after graduation, is offered on the same conditions, to the class which enters the School in September, 1887.

COMMENCEMENT OF THE TERM, VACATION, ETC.

The session for 1887-88 began on Thursday, September 22, and will continue till the third Wednesday in May, when the public anniversary is held. The annual examination of the classes and the meeting of the Alumni, are held in the same week. The next annual term will begin on Thursday, September 20, 1888.

By thus throwing all the vacations into one, the most favorable season of the year is secured for study, while the opportunity is given, in the four months' vacation, to engage in some form of benevolent labor, in connection with the mission efforts of the churches, or in the service of one of the benevolent societies, by which the practical experience required of the pastor, as well as pecuniary compensation, may be obtained. Should any students prefer to spend the vacation in theological reading, the Professors will counsel them in the choice of books.

Blank forms of application for admission may be obtained of the Secretary of the School, Professor George E. Day, New Haven, Conn., or from any of the other Professors.

DEPARTMENT OF MEDICINE (YALE MEDICAL SCHOOL)

FACULTY

REV. TIMOTHY DWIGHT, D.D., LL.D., PRESIDENT
MOSES C. WHITE, M.D., *Professor of Pathology*
CHARLES A. LINDSLEY, M.D., *Professor of Theory and Practice of Medicine*
LEONARD J. SANFORD, M.D., *Professor of Anatomy*
WILLIAM H. CARMALT, M.D., *Professor of Surgery*
JAMES K. THACHER, M.D., *Professor of Physiology and Clinical Medicine*
FRANK E. BECKWITH, M.D., *Professor of Clinical Gynecology*
JAMES CAMPBELL, M.D., *Professor of Obstetrics and Diseases of Women and Children*
THOMAS H. RUSSELL, M.D., *Professor of Materia Medica and Therapeutics*
SAMUEL W. WILLISTON, M.D., *Assistant Professor and Demonstrator of Anatomy*
HERBERT E. SMITH, M.D., *Professor of Chemistry, and Dean*

OTHER INSTRUCTORS

WILLIAM H. BREWER, PH.D., *Lecturer on Sanitary Science and Public Health*
HENRY P. STEARNS, M.D., *Lecturer on Insanity*
SAMUEL B. ST. JOHN, M.D., *Lecturer on Ophthalmology*
HENRY FLEISCHNER, M.D., *Lecturer on Dermatology and Clinical Medicine*
FRANK H. WHEELER, M.D., *Assistant in Pathology*
WILLIAM G. DAGGETT, M.D., *Lecturer on Bacteriology*
CHARLES E. PARK, M.D., *Assistant in Clinical Surgery*
HENRY L. SWAIN, M.D., *Lecturer on Diseases of Throat and Ear*
THOMAS G. LEE, M.D., *Lecturer on Histology*

In the fall of 1810 a charter was granted to the President and Fellows of Yale College and the President and Fellows of the Connecticut Medical Society, authorizing them to unite according to the terms of certain "Articles of

Union," before agreed upon, for the establishment of a medical seminary, to be styled the Medical Institution of Yale College. Two years later the School was organized, and in the fall of 1813 instruction was begun. The Faculty consisted of four professors, appointed by the College Corporation from nominations by the Medical Society. Degrees were conferred by the College on the recommendation of the board of examiners, consisting of the members of the Faculty and an equal number appointed by the Medical Society. The instruction consisted of didactic and clinical lectures and dissections during the short winter course. Later, instruction was given during the spring months also, and from time to time the number of instructors was increased.

That this dual nature of the School and the method of instruction were wisely planned is shown by the position which the School took at once in the medical instruction of the time. But changes were gradually taking place in the relations between practitioners and students of medicine, and even greater changes in medicine itself, which seemed to demand a different kind of instruction. This School responded early to this demand, and in 1879 an entrance examination was imposed and a graded course extending over three full years and including considerable laboratory instruction was adopted. In 1884, by an agreement with the Medical Society, the College authorities assumed the entire control of the School.

The methods of instruction now employed are similar to those in vogue in the other departments of the University, and consist of lectures, recitations, and laboratory work, in the various studies of the curriculum. The course is designed to impart to the student a thorough and practical knowledge of scientific medicine. The School has well equipped laboratories for the study of anatomy, histology, chemistry, physiology, and pathology, and the student spends much of his time in them during the first two years. In the second year he begins the practical branches of medicine, to which he devotes the third year.

While the attention of the student is particularly directed to those branches which can be studied to advantage only in a well equipped medical school, the value of clinical instruction is fully appreciated, and good facilities for illustrating the diagnosis and treatment of diseases are found in the various public medical services in the city. The details of the course of instruction are given below.

TERMS OF ADMISSION

Candidates for admission to the course leading to the degree of Doctor of Medicine, must be at least eighteen years old, and must present satisfactory testimonials of moral character from former instructors or physicians in good standing.

As evidence that he has had a sufficient preliminary education, each candidate must present proof that he has passed the matriculation examination of some scientific, literary, or professional college in good standing; or present testimonials from the proper officer that he has pursued the course at some high school, academy, or preparatory school, approved by the Faculty; or he must pass an examination in the following subjects:

1. MATHEMATICS: Algebra to Quadratics; Geometry, Euclid, two books or its equivalent; Metric system of Weights and Measures.
2. PHYSICS: Balfour Stewart's Elementary Physics, or some equivalent work.

These examinations are conducted in writing. Grammar, spelling, and construction are considered in judging of the papers. Copies of the questions of previous examinations will be furnished on application to the Dean.

These examinations will be held at the Medical School at 9 A. M., on the Wednesday preceding the opening of the first term, and on the Thursday following Commencement.

In conjunction with other Departments, examinations will be held on the Thursday after Commencement in Chicago, Cincinnati, and San Francisco. Particulars of

the time and place will be announced in the local papers. A fee of five dollars will be charged for admission to these examinations.

Students who have studied elsewhere either in recognized medical schools or under private preceptors of good standing, may present themselves for examination three weeks before Commencement and enter the examinations of the first, or of the first and second years, according to their time of study. The results of these examinations will determine the class to which they belong.

Applicants for advanced standing who present themselves at other times of the year will be assigned to such classes as from their representations they seem to be fitted for, but at the next annual examination they will be examined in all of the studies previously passed by their class as well as in those for the current year.

TERMS AND VACATIONS

The regular exercises of the School consist of three terms, covering thirty-four weeks, exclusive of a vacation of three weeks at Christmas and a recess in the spring, usually of one week.

The first term begins with the first Thursday of October, and continues eleven weeks. The second term begins three weeks after the close of the first, and continues twelve weeks. The third term is eleven weeks in length, ending with Commencement. (See Calendar, p. 6.)

COURSE OF INSTRUCTION

JUNIOR YEAR:

Chemistry: Lectures and recitations, five times a week, Professor Smith. Chemical Laboratory, four times a week, Professor Smith.

Anatomy: Lectures and recitations, four times a week, Professors Sanford and Williston. Osteology and Syndesmology, laboratory work and recitations, twice a week, Professor Williston. Dissections, four times a week from November 1 to April 1, Professor Williston. Autopsies, Professor White.

Histology: Lectures and laboratory work, twice a week, Dr. Lee.

Physiology: Recitations twice a week, Professor Thacher.

MIDDLE YEAR :

Anatomy: Lectures and recitations, four times a week, Professors Sanford and Williston. Dissections, four times a week from November 1 to April 1, Professor Williston.

Materia Medica and Therapeutics: Lectures and recitations, three times a week, Professor Russell.

Physiology: Lectures and recitations, once a week, Professor Thacher.

Pathology: Lectures and recitations, once a week, Professor White. Laboratory work, once a week, Professor White and Drs. Wheeler and Lee. Autopsies, Professor White.

Medicine: Lectures and recitations on General Medicine, three times a week, Professor Lindsley.

Surgery: Lectures on General Surgery, three times a week, Professor Carmalt.

Obstetrics and Diseases of Women and Children: Lectures and recitations, twice a week, Professor Campbell.

Dispensary Clinics, daily. Hospital Clinics. School Clinics, three times a week. Operations at the Hospital.

SENIOR YEAR :

Pathology: Lectures and recitations, once a week, Professor White. Laboratory work, once a week, Professor White and Drs. Wheeler and Lee. Autopsies, Professor White. Bacteriology, once a week, second term, Dr. Daggett.

Medicine: Lectures on General Medicine, three times a week, Professor Lindsley. School Clinic, once a week, Professor Thacher. Hospital Clinics, twice a week for five months, Professor Thacher and Dr. Fleischner. Lectures on Insanity, once a week, for nine weeks, Dr. Stearns. Sanitary Science, Professor Brewer, and Toxicology, Professor Smith, once a week, first term.

Surgery: Lectures on General Surgery, three times a week, Professor Carmalt. Surgical Clinic, once a week, Professor Carmalt. Lectures on Ophthalmology, once a week, Dr. St. John. Ear and Throat Clinic, once a week, Dr. Swain.

Obstetrics and Diseases of Women and Children: Lectures and recitations, twice a week, Professor Campbell. Clinic for Diseases of Women, Professor Beckwith.

Dispensary Clinics, daily. Hospital Clinics. School Clinics, three times a week. Operations at the Hospital.

CHEMISTRY—In the lectures and recitations on *General Chemistry* the students are as well grounded as is practicable on the fundamental principles of the science, on the formulation of reactions, and the solution of problems. The properties of the elements and their chief compounds are illustrated by experiments and the use of a large collection. Much attention is devoted to the study of the compounds of carbon; the properties and theories as to the constitution of these important bodies are illustrated by specimens and by the preparation of many of the typical compounds before the class.

Qualitative Analysis is taught so far as to require each student to be able to analyze a mixture of the salts of the common metals. Each student is furnished with a desk and all required apparatus and reagents. The course is systematic and is well adapted to cultivate habits of observation and the analytical method of thought. The elements of *Quantitative Analysis* are taught, a number of typical determinations being made by volumetric and gravimetric methods.

The course in *Physiological Chemistry* consists of recitations and a practical laboratory study of the composition and reactions of the various animal tissues and fluids, the processes of metabolism and digestion, and the action of ferments. Due attention is paid to the composition of foods, the physiological use of the digestive preparations, and other matters of medical interest, especially to the recent analytical methods employed in clinical work. The study of normal urine is supplemented by abundant practice in the chemical and microscopical examination of pathological specimens.

ANATOMY—The instruction in anatomy aims at thoroughness and comprehensiveness by means of lectures, recitations, and dissections. The lectures are fully illustrated, and the topics thus presented are reviewed and supplemented by frequent recitations from Gray's *Anatomy* as a text-book, thus fixing accurately the knowledge of the student. Practical work in the dissecting room, under the supervision of the Demonstrator, is required of each student. The rooms for this purpose are provided with all necessary material and appliances, and every encouragement will be given by the Professor for the pursuit of practical work, whether in human or comparative anatomy, by such students as wish to extend their studies beyond the prescribed course. Dissection forms the basis of all lasting knowledge in anatomy, and thorough work is insisted upon. The methods employed in the preservation of material are such that there is little or no danger to health from dissection wounds.

During the early part of the course, laboratory instruction in *Osteology* and *Syndesmology*, preparatory to recitations, is given by the Professor upon material in the hands of each student. In the latter part of the course the practical work upon the skeleton and cadaver is supple-

mented by a course of lectures on superficial and regional anatomy, with demonstrations and examinations upon the living subject.

Normal Histology—The course in histology consists of laboratory work with lectures and recitations. Each student is furnished with a microscope and all reagents and apparatus required for thorough work. He receives a number of sections of each tissue and organ of the body, which are carefully prepared for him in various ways, so as to illustrate fully the different points of structure, of which he makes drawings.

In addition to the study of the structure of tissues, the course includes thorough personal instruction in the technology of the subject. The student is taught practical methods of preserving specimens, of hardening, and of cutting and staining sections.

Lectures illustrated with the lantern are a special feature of the instruction, the transparencies being made from photographs of typical preparations and diagrams.

A large reference collection, abundant material, and the most recent instruments and publications, afford good facilities for advanced work.

PHYSIOLOGY—The design of the regular course of instruction in this branch may be described as essentially the impression of modern physiology on the mind of the student, on the lines and methods, and according to the measure of Dr. Foster's excellent presentation in his manual. For this purpose full experimental illustrations are given, and such other demonstrations as are of service in making the knowledge real and lasting. In the experiments the students are employed in turn as assistants, and thus acquire both an intimate knowledge of the subject and a manual skill which will be of service to them in their professional work. Informal recitations are regularly held with the design of affording the student an opportunity of asking questions, as well as of marking out for him a regular amount of private daily study.

Care is taken to call attention to the relations of physiological facts, as they present themselves, to practical medicine.

Students desirous of investigating some particular subject in experimental physiology will be taken into the physiological laboratory without extra charge, furnished with the requisite apparatus, and directed in their work.

MATERIA MEDICA AND THERAPEUTICS—The instruction in this department is given by recitations chiefly. These are illustrated by the specimens from a large collection of the materia medica, though the botany, physical character and chemical composition of drugs, receive much less attention than their physiological actions and therapeutical uses; the lectures are devoted more particularly to the elucidation of the latter subjects. A reasonable portion of time is devoted to exercises in prescription writing, in both the metric and English systems

The students are required to prescribe for a large variety of hypothetical cases, calling for the administration of most of the drugs of the *materia medica*.

PATHOLOGY—The instruction in pathology consists of lectures, recitations and laboratory work in pathological histology. The laboratory is supplied with excellent microscopes which are furnished to each student, together with all necessary apparatus and reagents for the preparation, study and preservation of microscopical specimens of morbid tissues.

Pathological anatomy is illustrated by a large collection of specimens and drawings, with which the museum is supplied, and supplemented by fresh pathological specimens. Students are also expected to attend all the autopsies made at the Morgue of the New Haven Hospital. This large and convenient morgue was constructed with special reference to rendering autopsies available for the instruction of students.

Bacteriology—The School has a well equipped laboratory for the study of bacteriology. The instruction in this subject consists of a course of lectures, in which the modern methods of isolating and identifying bacteria are fully demonstrated.

THEORY AND PRACTICE OF MEDICINE—The method so long in vogue in medical schools of teaching this important branch solely by didactic lectures, has for a few years past been superseded by a method combining lectures and recitations in the same exercise. It is the experience of this School that the latter method has been attended with much more satisfactory results. By this mode of instruction the student is not only informed of the special subject of the day, but is required to prepare himself from a text-book. During the recitations questions upon the subject are encouraged, and the Professor has thus the best opportunity to explain such obscure points as he may find are not fully appreciated. The intent and aim of the teaching is to give the instruction a practical direction, the teacher being constantly mindful of the real needs of the student.

Clinical Instruction is carried on at the School, at the New Haven Hospital, and at the New Haven Dispensary.

In the medical clinics at the School, the preliminary examination is made by a student, and this is reviewed and extended as far as necessary by the instructor; the latter explains the relations of the symptoms, makes the diagnosis, and gives the student in charge general directions for treatment; the student, subject to correction, gives the precise directions to the patient. All symptoms and physical signs are demonstrated to all the members of the class, and examinations of urine, sputum, and blood are made when called for.

It is the especial aim in these clinics to familiarize the student with

all methods and instruments of diagnostic examination, and the instruction is made as personal as possible. Cases which need to be seen at home are put in charge of the senior students, and obstetrical cases are assigned to them. In such cases the Professor of Clinical Medicine gives counsel whenever called on.

At the Hospital two medical clinics are held each week during five months of the term, by Professor Thacher and Dr. Fleischner; these are general medical clinics, but particular attention is given to the demonstration of the various signs of importance in physical diagnosis.

In addition to these, which are regular college exercises, clinics are held from time to time at the Hospital by Professor White and Dr. S. D. Gilbert of the visiting staff; and students are admitted to the clinics of the Dispensary.

Instruction is given on special topics in medicine, as follows:—

Mental Diseases, a course of didactic lectures by Dr. Stearns, and visits to hospitals for the insane.

Sanitary Science and Public Health, a course of lectures by Professor Brewer, including the elements of these subjects, with a discussion of methods in practice, and of public sanitary administration.

Toxicology, a course of experimental lectures by Professor Smith, including a discussion of the general subject matter of the science, and the statistics of the common poisons.

SURGERY—Three didactic lectures to the Senior and Middle classes are given weekly, on the principles and practice of surgery, the course running through two years. Illustrations of minor surgical practice are shown in the service of the New Haven Dispensary, by Professor Carmalt, who has charge of the surgical division. The wards of the New Haven Hospital afford opportunities for the observation and study of the more severe injuries and important surgical diseases. Professors Carmalt and Russell are of the visiting staff; they hold weekly clinics during their terms of service, and the advanced students are shown the cases during their whole stay in the Hospital, studying the causes which necessitate operations, where such are necessary, seeing the operations, among which are many of the most important in surgery, and observing the results of treatment.

Ophthalmology is taught in a special course of lectures by Dr. S. B. St. John, of Hartford, and illustrated by a large number of cases in the surgical clinic, particular attention being given to their elucidation.

Otology and Laryngology are taught by Dr. Swain in the School clinics. Each student is required to make examinations with instruments, and becomes familiar with their use and with the normal and principal pathological conditions of the throat and ear.

OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN—Instruction is given in obstetrics by lectures and recitations, with practical demon-

stration of the operations of midwifery. Senior students are assigned obstetrical cases from the School clinics, under the direction of one of the Faculty.

Gynaecology is taught by lectures, recitations, and clinics. The Senior class receive instruction from Professor Beckwith at the bed-side in the Hospital.

Diseases of Children—This important branch of medicine is taught by didactic lectures and recitations, as well as by clinical instruction at the Dispensary and Hospital.

THE NEW HAVEN HOSPITAL is situated but a short distance from the School building, and being the only hospital in a city of eighty thousand inhabitants, and a considerable railroad center, its wards constantly afford ample material for the illustration of disease, and furnish frequent occasion for the performance of the various surgical operations.

An operating theatre is now in the process of construction, which will be thoroughly equipped with every requisite and convenience for surgical work. The arrangements are planned with special reference to making the operations available for purposes of instruction to students.

Three Resident Physicians are appointed annually according to the results of an examination before the medical staff. Graduates of this School frequently obtain appointments also in the hospitals of neighboring cities.

THE NEW HAVEN DISPENSARY is located on the School grounds, and is visited by several thousand patients annually. Its service affords a large variety of medical cases and minor surgical ills.

EXAMINATIONS are held at the close of each year on the studies of the year. The examinations at the end of the first year are upon Chemistry, Histology, and Elementary Physiology.

Those at the end of the second year are upon Advanced Physiology, Anatomy, Materia Medica and Therapeutics.

Those at the end of the third year are upon Pathology, Surgery, Medicine, and Obstetrics.

REQUIREMENTS FOR A DEGREE

Every candidate must be twenty-one years of age, and of good moral character; he must have pursued medical studies for three years, two of which must have been spent in a recognized medical college, and the last at this School; he must have passed the required examination in all the studies of the three years' course, and have presented a satisfactory thesis.

PRIZES

THE KEESE PRIZE—The income of the fund for the Keese Prize, a memorial of Hobart Keese, M.D., of the class of 1855, which amounts to about \$160 annually, is awarded by the Faculty to that member of the graduating class who presents the best thesis. If among the theses offered, none are of sufficient merit, the prize may be withheld. The theses should be presented to the Dean on the third Wednesday before Commencement.

PRIZE FOR BEST EXAMINATIONS—A prize, consisting of a set of obstetrical instruments, will be awarded by Professor Campbell to that member of the graduating class who passes the best examinations in the studies of the Senior year.

LIBRARY

The students of this Department can obtain from the Dean tickets admitting them to the free use of the University Library, which contains over 135,000 volumes and includes the Medical Library.

GYMNASIUM

The privileges of the College Gymnasium can be had on payment of a small fee.

FEES AND EXPENSES

FIRST YEAR :

Matriculation (paid but once),	\$ 5.00
Tuition,	125.00
Practical Anatomy (including instruction and material),	10.00

SECOND YEAR :

Tuition,	125.00
Practical Anatomy,	5.00

THIRD YEAR :

Tuition (to Seniors who have paid for two years),	75.00
Graduation,	30.00

A deposit of \$5 is required in the chemical laboratory, and one of \$1 in the histological laboratory, to cover the cost of apparatus broken by the student; at the end of the year the excess over the amount of breakage will be returned.

These fees give entrance to all of the instruction of the School, including not only the lectures and quizzes, but the practical courses in analytical and physiological chemistry, urinary analysis, histology, pathology, osteology, syndesmology, and in clinical medicine and surgery.

The tuition fee for the first and second years is due at the beginning of each of the three terms, in instalments of \$45, \$45 and \$35, respectively; in the Senior year the installments are \$27, \$27 and \$21.

Fees are paid to the Treasurer of the University, except the graduation fee which is paid to the Dean.

BOND—Students who do not pay in advance are required to give a bond to the Treasurer for three hundred dollars, executed by a satisfactory bondsman; a blank for this bond will be furnished on application to the Treasurer. Those who deposit such bonds will receive term bills, with interest added, shortly before the end of each term, to be paid on or before the commencement of the next succeeding term, and students who deposit bonds must pay all arrearages before they can receive back their bonds from the Treasurer. No degree can be conferred until all term bills are discharged.

Students will be assisted in finding board and lodging by the Janitor.* Prices range from four and a half dollars a week upwards.

INSTRUCTION TO GRADUATE AND SPECIAL STUDENTS NOT CANDIDATES FOR A DEGREE IN MEDICINE

The instruction here offered to graduates in medicine is intended to meet the requirements of two classes of students: first, those who wish to review or supplement their

* Mr. James Troy, 148 York St.

knowledge of the regular studies of the medical curriculum, as taught in this School; and second, those who wish to fit themselves in special lines of medical work, as for the duties of a medical examiner, or for medico-legal and sanitary examinations.

Any of the regular courses may be taken, and special courses to meet the requirements of the student may be arranged at hours convenient to the instructors.

Special students are not taken in the practical branches of medicine, but the general studies of the course are open to such persons as may desire to pursue them, if by their previous studies they are prepared to profit by the opportunity.

The charges for instruction will depend on the courses taken, and can be ascertained for any particular line of study by applying to the Dean.

For further information, address Professor HERBERT E. SMITH, Dean. Office hours, from 11:30 A. M. to 12:30 P. M. on Wednesdays, at the School, 150 York st.

DEPARTMENT OF LAW (YALE LAW SCHOOL)

FACULTY

- REV. TIMOTHY DWIGHT, D.D., LL.D., PRESIDENT
HON. FRANCIS WAYLAND, LL.D., *Dean, and Professor of the Law of Evidence*
HON. WILLIAM C. ROBINSON, LL.D., *Professor of Elementary and Criminal Law and the Law of Real Property*
SIMEON E. BALDWIN, M.A., *Professor of Constitutional and Mercantile Law, Corporations, and Wills*
JOHNSON T. PLATT, M.A., *Professor of General Jurisprudence, Torts, and Equity*
WILLIAM K. TOWNSEND, D.C.L., *Edward J. Phelps Professor of Contracts and Admiralty Jurisprudence*
THEODORE S. WOOLSEY, LL.B., M.A., *Professor of International Law*
-

SPECIAL LECTURERS AND INSTRUCTORS

IN THE UNDERGRADUATE COURSE

- HON. EDWARD J. PHELPS, LL.D., *Instructor in Evidence*
MARK BAILEY, M.A., *Instructor in Forensic Elocution*
HON. MORRIS W. SEYMOUR, M.A., *Lecturer on Corporations*
M. DWIGHT COLLIER, M.A., *Lecturer on Attachments, Judgments, and Executions*
HON. WILLIAM E. SIMONDS, LL.B., *Lecturer on Patent Law*
THOMAS THACHER, LL.B., M.A., *Lecturer on Corporate Trusts*
JAMES M. TOWNSEND, JR., LL.B., *Lecturer on Transfer of Monetary Securities*
ROGER FOSTER, LL.B., M.A., *Lecturer on Federal Jurisprudence*

IN THE GRADUATE COURSE

- ALBERT S. WHEELER, M.A., *Instructor in Roman Law*
ARTHUR M. WHEELER, B.A., *Instructor in English Constitutional History*
WILLIAM G. SUMNER, LL.D., *Instructor in Political and Social Science*
ARTHUR T. HADLEY, B.A., *Instructor in Railway Management, and Economics of Transportation*
-

JOHN A. ROBINSON, LL.B., M.D., *Librarian*

It is the aim of the Law School to give to all students in its regular undergraduate course a thorough acquaintance with the general principles and rules of American law, so as to fit them for the Bar of any State; to extend to those who do not propose to become practicing lawyers, but wish to pursue some particular branches of legal or political knowledge, such assistance as they may desire; and to offer to advanced students, who are able to devote to it the necessary time, instruction in all that belongs to law as a science in its widest sense. Such instruction is now given in an undergraduate course, a graduate course, and two special courses.

The undergraduate course is mainly devoted to the practical side of legal education, but also gives some introduction to the general ideas and sources of jurisprudence. In the graduate course, the studies are so arranged that those of the first year have no necessary connection with those of the next, and can therefore be profitably pursued by themselves when the student has no time to devote to a more extended education. The first year is mainly occupied with further instruction in the practical topics begun in the undergraduate course, such as Corporations, Railroad Law, Patents, Code Pleading, and Practice in the United States Courts. The second year is mainly devoted to studies of a more scientific and philosophical character, including General and Comparative Jurisprudence, Legislation and Government, Roman Law, the French Codes, Private International Law, etc. It is believed that the studies of the undergraduate course, and of the first year of the graduate course, cover all the topics which it is desirable for the ordinary law student to examine before his admission to the Bar, and the fourth year (in which the degree of Doctor of Civil Law is awarded) is only recommended to those who desire to fit themselves to be something more than practicing lawyers. The special courses are described on page 147.

The Law School occupies an entire story of the Court House of New Haven County, facing the Green, on the

opposite side from the older College buildings. It has, upon the same floor, two lecture-rooms, a large library hall, the office of the Dean of the Faculty, and other apartments furnishing every needed convenience for quiz-clubs and debating societies. A special feature of the school is the peculiar facility which it affords its students for observing actual practice in court. This is due to the fact that in the Court House above-mentioned, two terms of the Supreme Court of Errors of Connecticut are held annually ; and the Superior Court and Court of Common Pleas (the principal Civil and Criminal Courts of the State) are also in session almost daily, during each of the Law School terms.

The students are allowed the freest access to the large library of the School, examining the books on the shelves for themselves, without the intervention of the librarian. The familiarity with the reports and authorities that is thus gained, the Faculty deem of great importance in accustoming the student to prepare his cases intelligently and thoroughly in his future practice. A debating society—the Kent Club—gives a good opportunity for practice in public speaking, and the formation of class quiz clubs, to meet in the Law School apartments, is also encouraged. The discussion of legal topics, unreservedly and familiarly by the students among themselves, is promoted, and the fact that they generally come from a wide range of States renders such comparisons of ideas of special interest and value to all. The share of the School in the general advantages of the University gives the students many opportunities of broadening their views and acquiring knowledge in regard to matters outside of their strictly professional work. They can, on application to the Dean, obtain permission to be present at one or more of the special courses of graduate instruction in the Department of Philosophy and the Arts, or the lectures on Medical Jurisprudence, Anatomy, Insanity, etc., in the Medical School, on payment of a moderate fee.

The College Gymnasium is open to members of the Law School on payment of moderate fees.

COURSES OF INSTRUCTION

The regular courses of instruction are as follows:

UNDERGRADUATE COURSE

JUNIOR YEAR:

Professor WAYLAND: Recitations—Evidence. Lectures—English Constitutional Law.

Professor ROBINSON: Recitations—Elementary Law, Pleading.

Professor BALDWIN: Recitations—Mercantile Law. Lectures—Nature and History of American Law, Wills.

Professor PLATT: Recitations—General Jurisprudence, Torts. Lectures—Jurisprudence.

Professor TOWNSEND: Recitations—Contracts.

Professor WOOLSEY: Recitations—International Law.

Mr. BAILEY: Lectures—Forensic Elocution.

SENIOR YEAR:

Professor ROBINSON: Recitations—Real Property, Criminal Law. Lectures—Estates, Conveyancing, Forensic Oratory.

Professor BALDWIN: Recitations—Mercantile Law, Corporations. Lectures—American Constitutional Law, Public Corporations, Roman Law, Practice.

Professor PLATT: Recitations—Equity.

Professor TOWNSEND: Recitations—Contracts.

Professor WOOLSEY: Lectures—International Law.

Mr. SEYMOUR: Lectures—Private Corporations.

Mr. SIMONDS: Lectures—Patents.

Mr. COLLIER: Lectures—Attachments, Judgments, and Executions.

Mr. THACHER: Lectures—Corporate Trusts.

Mr. J. M. TOWNSEND: Lectures—Transfer of Monetary Securities.

Mr. FOSTER: Lectures—Federal Jurisprudence.

GRADUATE COURSE

FIRST YEAR:

Professor ROBINSON: Recitations—Patents.

Professor BALDWIN: Recitations—Railroad Law, Practice in U. S. Courts. Lectures—American Constitutional Law.

Professor PLATT: Recitations—Municipal Corporations, Statute Law.

Professor TOWNSEND: Recitations—Admiralty Law, Sales.

Professor WOOLSEY: Lectures—International Law.

Professor SUMNER: Lectures—Political History and Science.

Professor A. M. WHEELER: Lectures—English Constitutional History.

Professor HADLEY: Lectures—Railway management.

SECOND YEAR :

Professor ROBINSON : Lectures—Canon Law.

Professor BALDWIN : Recitations—Comparative Jurisprudence, Code Napoléon, Conflict of Laws.

Professor PLATT : Recitations—General Jurisprudence.

Professor SUMNER : Lectures—Political and Social Science.

Mr. A. S. WHEELER : Recitations—Roman Law.

Professor HADLEY : Lectures—Economics of Transportation.

The method of instruction, as will be seen by the foregoing schedule, is mainly that of recitations. It is the conviction of the Faculty of this Department, as well as the tradition of the University, that definite and permanent impressions concerning the principles and rules of any abstract science are best acquired by the study of standard text-books in private, followed by the examinations and explanations of the recitation room. Hence, although certain subjects are separately taught by lectures, either because the want of proper manuals, or the constant and rapid advance of learning, or economy of time, requires the adoption of that method, care is taken that the same topics shall be covered by recitation work in connection with the wider branches of the law to which they belong. The recitation hours, however, are not devoted entirely to the questioning of the student. While this is done with sufficient thoroughness to hold him up to his work of preparation, ample opportunity is afforded for a free colloquial discussion of the subject of the lesson and for the presentation and solution of the difficulties which he may have encountered in his private study. In this manner each student is brought into personal communication with the instructor in reference to his daily work, and as far as practicable receives the benefits which would be obtained if he were placed under the individual tutorship of his professor.

The several courses of study to which the attention of the student is directed in his undergraduate career are intended to familiarize him with all the branches of the law, which ordinarily become useful to the practitioner in the earlier years of his professional life. The course, embracing Jurisprudence, American Law, English and American Constitutional Law, and Elementary Law, is pursued under the guidance of four different professors. In this course, the fundamental conceptions which underlie all systems of jurisprudence are brought to the notice of the student and fully defined and explained; the peculiar doctrines which characterize our American Law are pointed out; the principles of constitutional government, and the special features it exhibits both in this country and in England, are discussed; and the entire body of the common law in its four great divisions, is reduced to clear and distinct propositions and illustrated by numerous collateral

readings. This course alone covers the ground usually traversed by the student in an office prior to his admission to the bar.

The course in Real Property includes recitations in a standard work of a general character, and, subsequently, in text-books upon special subjects, such as the law of Mortgages, the law of Landlord and Tenant, etc. Collateral to this course are two others: one, a series of lectures on Estates, in which the law and practice in Guardianships of Infants and Incapables, and in the Administration of Decedents' Estates, are considered; the other, a course of practical instruction in Conveyancing, in which the students are exercised in drawing all the instruments commonly employed in the transaction of business concerning real property.

The course on Contracts is the most extended, as it is the most important, in the School. It occupies a greater part of the time of two of the professors. It continues during both the Junior and Senior years, and embraces, among other important topics, those of Agency, Bailments, Bankruptcy and Insolvency, Bills and Notes, Consideration and Assent, Contract Liabilities of Infants and Married Women, Liens, Marine, Fire and Life Insurance, Partnership, Sales, Shipping, Sureties, Trademarks, and Telegraphs. In addition to the text-books used in this course, the leading cases, decided since the text-book was written, are referred to, thus bringing the law on each point down to the date of instruction. Collateral to this course are five others: one on Wills, in which the law of testamentary dispositions and executorship is examined; another on Patents, in which the nature of patentable inventions, the mode of issuing letters patent, and the remedies for infringement are considered; a third on Corporations in general, treating the law governing the organization, privileges, duties, and liabilities of all incorporated bodies; the fourth and fifth on Private and Public Corporations respectively, in which the practical arrangement of bodies politic of both classes is illustrated and explained.

The course on Torts consists of recitations on that subject, from recent and approved text-books, with a running commentary by the instructor, explaining and applying the principles contained in the lesson.

The course on Equity embraces the whole body of Equity Jurisprudence, and is taught by recitations from the text-book, with occasional lectures on the obscurer topics. Collateral to this course is a series of lectures on Equity Pleading, discussing the principles and practice by which equitable remedies are governed and applied.

The course on Criminal Law extends throughout the Senior year, covering the entire matter contained in the exhaustive treatises now accessible, and embracing the topics of Procedure and Evidence as well as the substantive law of Crimes. Current cases of note, arising in any part of the country, are made subjects of discussion in connection with the rules of law by which they are to be decided.

The course on Pleading embraces the subjects of Common Law

Pleading and Code Pleading, both taught by recitations and examples; while the details of the latter are enforced by requiring the students to draw complaints, answers, etc., in cases of their own selection, and to submit them to the instructors for criticism and correction.

The course on Evidence covers the matter contained in the first and second volumes of *Greenleaf on Evidence*: the subjects in the first volume being taught by recitation from the text-book; those in the second, by lectures amplifying and explaining, in the light of modern cases, the principles involved in the various topics. Collateral to this and the foregoing course are four others: one on Forensic Oratory, consisting of a series of lectures, in which the preparation and conduct of a suit, in all its different stages, are explained; the second, on Forensic Elocution, in which practical instruction is given in the art of public and forensic speaking; the third on Process, including the subjects of Attachments, Garnishment, and Execution; and the fourth on Practice, a series of familiar lectures on the methods of transacting general legal business.

The course on International Law occupies portions of both undergraduate years. In the Junior year the work consists of recitations covering the field occupied by Woolsey and Pomeroy on International Law. In the Senior year, instruction is given by lectures on particular topics, especially on questions which are, for the time being, exciting public attention, and which demand the application of the principles examined in the previous year.

The course on Roman Law is intended as an introduction to the more advanced studies of the Graduate years, and, though necessarily brief, is sufficient to communicate to the student an accurate knowledge of the distinguishing features and doctrines of the civil law, and to refer him to the original sources for more detailed information.

The studies of the first Graduate year have been selected with a view of preparing the intended practitioner for the higher walks of professional life. The subjects are of universal interest, the law which governs them is substantially the same in all parts of the country, they involve the most extensive financial enterprises of the age, and on these accounts form the most important practical topics at present embraced within our law. Particular attention to them has, therefore, been deemed an essential requisite to a finished legal education, and the devotion to them of an additional year, on the part of students and instructors, has been thought a wise if not a necessary measure. The various courses are critically taught both by text-book and by lecture, and each student receives all the assistance he desires in his personal examination of cases and authorities. Special attention is paid to the methods of practice and pleading in the United States Courts, both in common law, equity, and admiralty cases, and instruction is therefore given on these subjects by three of the Faculty. The students are required to draft

pleadings, and in matters of special difficulty, such as the conduct of proceeding *in rem* in admiralty, these pleadings are carried on through all the usual steps, and the issues made up are argued before the Professor. They are also made familiar with the leading cases on these points in the United States Supreme, Circuit and District Courts. The value of this year of special work to the earnest and intelligent graduate cannot be overestimated.

The courses of instruction in the second Graduate year are designed to afford to the advanced student an opportunity to round out his legal acquirements with a knowledge of the more profound and philosophical principles of human law. The primary conceptions to which he was introduced at the commencement of his studies are again taken up and developed in a scientific method, and examined in the light of various systems of practical jurisprudence now or heretofore prevailing. In view of the limited time which can ordinarily be devoted by young men to these pursuits, the courses have been so arranged as to present these fundamental ideas as clearly and in as many applications as is possible, leaving it to future private study to enlarge the outline and complete the details of the work.

The course on General Jurisprudence consists of lectures and recitations from such works as Austin on Jurisprudence, Holmes on the Common Law, etc., and the students are required to write theses on the various topics. The course on Roman Law comprises the careful study of the Institutes of Justinian, in connection with institutional works of modern authors, and the perusal of selected titles from the Digest, accompanied by oral explanation. Particular attention is devoted to this course of study, and every effort is put forth to make the students familiar with the doctrines of the civil law, as well as with the technical language in which these have been expressed. The course on Comparative Jurisprudence includes among its chief branches a careful study of the French Codes, compared with other systems of jurisprudence, particularly the Roman, English, and American, and recitations upon private international and inter-state law, with the investigation of leading cases on these subjects, decided in the French and American courts. The course on Canon Law consists of a series of lectures on the history, development, and fundamental theories of the Canon law, with select readings from the *Corpus Juris Canonici*, and from French and English treatises upon the subject. The course on Political and Social Science is one of the principal courses in the Philosophical Department of the University (see page 98), and is attended by the Graduate students of the Law School in common with the members of that Department. The course on the Economics of Transportation is a continuation of the series of Lectures on Railway Management given in the first graduate year, extending the view of the student from the single subject of railways to all the instrumentalities of commerce.

In addition to the regular courses of instruction, two Special Courses are provided: one for those who desire some acquaintance with law as a preparation for business life; the other for persons not intending any active business or professional career, but desiring to acquire an enlarged acquaintance with our political and legal systems and the rules by which they are governed. The first of these special courses covers a single year; the second comprises two years. The studies of the first course are arranged as follows:

FIRST SPECIAL COURSE—ONE YEAR

Professor ROBINSON: Recitations—Elementary Law. Lectures—Estates.

Professor BALDWIN: Recitation—Agency, Partnership, Corporations, Bills and Notes, Bankruptcy and Insolvency. Lectures—American Law, American Constitutional Law.

Professor PLATT: Recitations—General Jurisprudence, Torts.

Professor TOWNSEND: Recitations—Marriage, and Husband and Wife, Sales, Shipping, Insurance, Sureties, Bailments, Telegraphs, Trademarks, Liens.

Professor WOOLSEY: Recitations—International Law.

Professor HADLEY: Lectures—Industrial Legislation.

Mr. BAILEY: Lectures—Elocution.

Mr. COLLIER: Lectures—Attachments, Judgments, and Executions.

Mr. THACHER: Lectures—Corporate Trusts.

Mr. J. M. TOWNSEND: Lectures—Transfer of Monetary Securities.

SECOND SPECIAL COURSE—TWO YEARS

FIRST YEAR

Professor ROBINSON: Recitations—Elementary Law. Lectures—Estates.

Professor BALDWIN: Recitations—Bankruptcy and Insolvency. Lectures—American Law, American Constitutional Law, Roman Law.

Professor PLATT: Recitations—General Jurisprudence.

Professor TOWNSEND: Recitations—Sales, Insurance.

Professor WOOLSEY: Lectures—International Law.

Professor SUMNER: Lectures—Political and Social Science.

Professor FARNAM: Lectures—Public Finance.

Professor HADLEY: Lectures—Industrial Legislation.

Mr. BAILEY: Elocution.

Mr. SEYMOUR: Lectures—Private Corporations.

Mr. WHITE: Lectures—Local Government in the United States.

SECOND YEAR

Professor BALDWIN: Recitations—Private International Law.

Professor PLATT: Recitations—Municipal Corporations, General Jurisprudence.

Professor WOOLSEY: Lectures—International Law.

Professor SUMNER: Lectures—Political and Social Science.

Mr. WHEELER: Recitations—Roman Law.

Mr. THACHER: Lectures—Corporate Trusts.

Mr. J. M. TOWNSEND: Lectures—Transfer of Monetary Securities.

Mr. FOSTER: Lectures—Federal Jurisprudence.

In the latter course the students may, at their option, defer some of the studies of the first year until the second, and when desired, other branches taught in the Law School may be pursued, instead of certain of those here mentioned, at the discretion of the Faculty. Some or all of the studies of this course may be taken by those who, having received a bachelor's degree implying a course of undergraduate study equivalent to that pursued in the Academical Department, are completing their education with a view of applying for the degree of Doctor of Philosophy (see page 96). Those who take the full course may apply for the degree of Bachelor of Civil Law (B.C.L.).

Besides these various exercises, the undergraduate students are required, from time to time, to draft contracts, wills, and other similar instruments; the work of each being reviewed and commented upon, either in public or in private, by the instructor. Moot Courts are regularly held, at which one of the professors presides as judge; and the students acting as counsel, in the argument of cases, are required to draw the necessary pleadings, according to the common law or equity forms, as the case may be. Occasionally, also, cases are tried by the students before a jury of their own number, in a court regularly organized, with a full complement of judicial, clerical, and executive officers, where the proceedings are conducted in the same manner as in ordinary courts of law.

TERMS AND VACATIONS

There are three terms in each year: the Fall Term, beginning thirteen weeks from the day after Commencement, and continuing to the Thursday before Christmas; the

Winter Term, beginning in January, after a vacation of three weeks, and lasting eleven weeks; and the Spring Term, beginning after a vacation of two weeks, and continuing until Commencement.

REQUIREMENTS FOR ADMISSION

UNDERGRADUATE COURSE

Applicants for admission to the Junior Class must be at least eighteen years of age, and must produce certificates of good moral character. Students who have not taken a degree from some collegiate institution will not be admitted as candidates for the degree of LL.B., until they have passed satisfactory examinations on the outlines of the History of England (Green's History of the English People is recommended) and of the United States, and on the text of the Constitution of the United States. Those, however, will be excused from this examination who present a certificate that they have passed a "Regent's Examination for Law Students," conducted under the authority of the Board of Regents of the University of the State of New York.

To entitle a person to admission to advanced standing as a member of the Senior class, he must be at least nineteen years of age; must, if a College graduate, have studied law under a competent instructor, or at the Law School of some College or University, for at least one year; must, if not a College graduate, have studied law under a competent instructor for at least two years, or at a Law School for at least one year; and must pass such examinations as are required for those entering the Senior Class in the regular course, at which it will be sufficient if he is prepared to be questioned on Parsons on Contracts (excepting only from vol. ii, pages 257 to 488, and from vol. iii, pages 350 to 423 and 525 to 557); Blackstone's Commentaries (except Book 4), Robinson's Elementary Law, Gould on Pleading, Townsend's Notes on Code Pleading, Greenleaf on Evidence, vol. i, Cooley on Torts, and the elementary princi-

ples of testamentary law, as given in such works as Hawkins on the Construction of Wills. Those not College graduates must also pass the preliminary English entrance examination, or produce a "Law Student's Certificate," from the Regents of the University of the State of New York. Attorneys at law, however, of any State are entitled to admission to the Senior Class, without examination, on the exhibition of their certificates of admission to the bar; and special students, not candidates for a degree, will be admitted to any of the exercises of the School without examination.

GRADUATE COURSE

The first year of the graduate course is open, without examination, to graduates from any Law School, having the degree of LL.B.

The last year is open only to those who have successfully completed the studies of the preceding year, and received the degree of Master of Law (M.L.). A preliminary examination upon the outlines of Roman Law and Roman History must also be passed, by all who have not taken their Bachelor's degree at some Law School where Roman Law is a prescribed study. The degree of Doctor of Civil Law (D.C.L.) may be applied for at the end of this year, by those who have been graduated at some collegiate institution as Bachelor of Arts or Philosophy; or who are graduates of this Law School, and have attained a prescribed standard of scholarship on their examinations for the degrees of LL.B. and of M.L. A good knowledge of either the French or German language, as well as of Latin, is also required. The Faculty will present no one for the degree of D.C.L., who has not attained a high standard of proficiency in the studies pursued.

EXAMINATIONS

There will be an examination of candidates for admission to the Junior Class immediately after the opening of the Fall Term. Candidates for admission to the Senior

Class are examined at the end of the Spring Term, or beginning of the Fall Term. Seniors are examined for a degree, only at the close of the Spring Term. In the undergraduate course there are certain studies upon which all students are examined at the close of the year, and others upon which only those who desire, are examined. The award of "honors" is confined to those who pass both examinations. The Junior "pass" examination includes the studies of the year in Elementary Law, Contracts, Pleading, Evidence, Torts, and Wills. The Junior "honor" examination includes the studies of the year in Jurisprudence and International Law, and such other branches as the Faculty may from time to time prescribe. The Senior "pass" examination includes the studies of the year in Contracts, Real Property, Criminal Law, Equity, American Constitutional Law, Patents, Public and Private Corporations, and Estates. The Senior "honor" examination includes the studies of the year in International Law, Roman Law, and such other branches as the Faculty may from time to time prescribe. Examinations for degrees in the graduate course are held at the close of the Spring Term. Every candidate for a degree, both in the undergraduate and graduate courses, must also submit a written thesis on a given legal topic, which must be approved by the Faculty.

LIBRARY, PRIZES, ETC.

The special Library of the Department, which has a permanent endowment for its support (the English Fund, established by the Hon. James E. English, M.A., in 1873), contains over eight thousand volumes, and is open daily during term time. It embraces all the reports of Great Britain and America, with an extensive collection of textbooks and the leading legal periodicals. The students can also draw books from the general University libraries, containing over 160,000 volumes.

The following prizes are open to competition :

The TOWNSEND PRIZE (established by the Hon. James M. Townsend, in 1874), of \$100, to that member of the Senior Class who shall write and pronounce the best oration or thesis at the public anniversary exercises on graduation.

The JEWELL PRIZE (established by the Hon. Marshall Jewell, M.A., in 1871), of \$50, to that member of the Senior Class who receives the highest marks at the final examination of his class, at their graduation.

The BETTS PRIZE (established by Frederic H. Betts, M.A., in 1875), of \$50, to that member of the Junior Class who receives the highest marks at his annual examination.

The O. S. SEYMOUR PRIZE (established by the family of the late Hon. Origen S. Seymour, LL.D., in 1885), of \$60, to that member of the graduating class who, in the opinion of the Faculty, has made the greatest improvement in scholarship during both years of his course.

DEGREES

In the undergraduate course the degree of Bachelor of Laws is conferred by the Corporation upon the recommendation of the Faculty of the Department, based on a satisfactory "pass" examination and the submission of a satisfactory thesis, on the following persons:

1st. Attorneys at Law, who have been members of the Department for one year after their admission to the Bar.

2d. Any students who have been members of the Department for not less than two years, and who passed satisfactorily the Junior "pass" examination at the end of their first year.

3d. Students who have been admitted to advanced standing as members of the Senior Class, and have remained in that Class for not less than one year.

The examination for the degree is mainly in writing, and is conducted under the supervision of an examining committee, appointed by the Superior Court, and the successful candidates, if twenty-one years of age, may be thereupon admitted to the Connecticut Bar. An oral ex-

amination is also had, upon one or two studies, before members of the Bar from different States, appointed for the purpose.

The degree of Bachelor of Civil Law (B.C.L.) will be conferred, after a satisfactory examination and submission of a satisfactory thesis, on those who complete the second special course of two years. In the graduate course the degrees of Master of Laws (M.L.) and Doctor of Civil Law (D.C.L.) are conferred under the conditions before specified.

Degrees are awarded, in cases of students of unusual merit, *cum laude*, *magna cum laude*, or *summa cum laude*.

EXPENSES

The fees for tuition and use of the library in the undergraduate and first special courses are \$45 for the Fall Term, \$35 for the Winter Term, and \$35 for the Spring Term, or \$100 for the entire year; and in the graduate and second special courses, for the first year, \$50 for the Fall Term, \$40 for the Winter Term, and \$40 for the Spring Term, or \$125 for the whole year; and for the second year, \$80 for the Fall Term, \$70 for the Winter Term, and \$70 for the Spring Term, or \$200 for the whole year; to be paid to the Treasurer of the University in advance, or secured by a bond with surety to his satisfaction. Where payment is not made in advance, interest will be added. The diploma fee is \$5, and the Court fees for admission to the Bar are \$8. A further fee of \$5 is chargeable for admission to practice in the United States Courts for the District of Connecticut, if this is also desired. The tuition charges for other special students vary in proportion to the amount of instruction and supervision required. Board and lodgings can be obtained at prices ranging from \$5 a week upwards.

For further particulars, inquiries may be addressed to Professor Francis Wayland, Dean of the Faculty.

LIBRARIES

ADDISON VANNAME, M.A., *Librarian*

FRANKLIN B. DEXTER, M.A., *Assistant Librarian*

J. SUMNER SMITH, B.A., *Librarian of the Linonian and Brothers
Library*

HORACE S. KEPHART, M.A., *Assistant*

The Standing Committee in charge of the Library, appointed by the Corporation, consists of the following:—President DWIGHT, Ex President PORTER, Professors SALISBURY, DAY, FISHER, NEWTON, and LOUNSBURY, and the Librarian.

The whole number of volumes in the several libraries of the University is about 188,000.

The UNIVERSITY LIBRARY contains about 135,000 volumes and at least half as many unbound pamphlets. For some years past the average annual increase has been 5,000 volumes. Of current periodical publications, including publications of learned societies, the Library receives an unusually large number, the foreign serials alone being not less than five hundred. While designed especially for the use of the officers, resident graduates, and students of the several Departments of the University, other persons may have the privilege of consulting and, by permission of the Library Committee, of drawing books. The Library is open daily, except Sundays, in term-time from 9:30 A. M. to 1 P. M., and from 2:30 to 5 P. M. (in Winter to 4:30 P. M.). In the Winter vacation it is open during the usual morning hours, and in the Summer vacation on Monday, Wednesday, and Saturday mornings.

The LINONIAN AND BROTHERS LIBRARY, occupying the north wing of the Library building, contains 29,500 volumes, to which additions of not far from one thousand volumes, chiefly of the best current literature, are annually made. It is designed primarily for the use of the students, and is open in term-time on Monday, Tuesday, Thursday, and Friday, from 1:30 to 3 P. M., and on Wednesday and

Saturday from 10 A. M. to 12 M., and from 1:30 to 4 P. M. In vacation it is open on Wednesday and Saturday from 10 A. M. to 12 M.

In addition to the periodicals received at the University Library there will be found in the Reading Room (in the Cabinet building) forty-four daily newspapers, American and foreign, as many weeklies, and over fifty periodicals. This is open daily in term-time from 9:30 A. M. to 8 P. M. (on Sunday from 1 to 8 P. M.).

In Dwight Hall, which is open daily from 10 A. M. to 10 P. M., will also be found forty-five newspapers and periodicals, mostly religious, and a library of nearly one thousand volumes selected mainly with reference to the study of the Bible.

The LAW LIBRARY, containing 8,500 volumes, among which are included complete sets of the English, American, Irish, and Canadian Reports, occupies rooms adjoining those of the Law School in the County Court House. It is open daily in term-time from 8:30 A. M. to 12:45 P. M., and from 2 to 5:30 P. M. (except Saturday afternoon); in vacation from 9 A. M.

The SHEFFIELD SCIENTIFIC SCHOOL LIBRARY, in Sheffield Hall, is a valuable collection of 6,000 volumes, chiefly mathematical.

The TROWBRIDGE REFERENCE LIBRARY of the Divinity School, in Bacon Memorial Hall, contains about 3,000 volumes of standard and recent theological literature. It is open in term-time throughout the afternoon.

The LOWELL MASON LIBRARY OF CHURCH MUSIC, in West Divinity Hall, is accessible to those interested in the study of this subject. It embraces about 8,000 titles in 4,000 volumes.

The Art School has a Library of about 500 volumes.

The Library of the Medical School is incorporated in the University Library.

The Library of the American Oriental Society, consisting of about four thousand books and manuscripts, is deposited in the University Library building.

PEABODY MUSEUM OF NATURAL HISTORY

TRUSTEES

PROFESSOR JAMES D. DANA, PH.D., LL.D., *Chairman*
GOVERNOR PHINEAS C. LOUNSBURY, LL.D., *ex-officio*
HON. ROBERT C. WINTHROP, LL.D.
PROFESSOR GEORGE J. BRUSH, LL.D., *Treasurer*
PROFESSOR OTHNIEL C. MARSH, PH.D., LL.D.
HON. GEORGE PEABODY WETMORE, M.A.
PROFESSOR EDWARD S. DANA, PH.D.

CURATORS

OTHNIEL C. MARSH, PH.D., LL.D., *Curator of the Geological Collection*
ADDISON E. VERRILL, M.A., *Curator of the Zoological Collection*
EDWARD S. DANA, PH.D., *Curator of the Mineralogical Collection*

In 1866, George Peabody, of London, but of Massachusetts birth, entrusted to a board of Trustees, selected by him, the sum of \$150,000, "to found and maintain a Museum of Natural History, especially in the departments of Zoology, Geology, and Mineralogy, in connection with Yale College." Of this sum \$100,000 was devoted by Mr. Peabody to the erection, "on land to be given for that purpose by the President and Fellows of Yale College, of a fire-proof building," "planned with special reference to its subsequent enlargement," to be, "when completed, the property of Yale College." Of the remainder of the gift, \$20,000 was set apart to "accumulate as a building fund," and \$30,000 to meet by its income from investment the expenses attending "the care of the museum, the increase of its collections, and the general interests of the departments of science before named."

Ten years later, in 1876, the first wing of the Museum—the part now standing—was completed and furnished with cases at a cost of \$175,000, the whole outlay being met by the accumulated building fund. The central part of the projected structure and the South wing—which will extend it to Library street—remain to be built whenever the means available for the purpose shall be adequate.

The first floor of the building is devoted to the department of Mineralogy and to the purposes of a large lecture room. The minerals occupy cases in the west room, the door of which fronts the entrance to the Museum. The minerals of the Gibbs collection, deposited by Col. George Gibbs with the College in 1809-10, and purchased in 1825 at a cost of \$20,000, and the extensive accumulations since made, are here preserved and for the most part on exhibition, making it one of the largest public collections in the country. The private cabinet of Professor Brush, arranged in drawers in his private room on the same story, although not open to general exhibition, adds greatly to the means of study and investigation in this department. Besides minerals, the exhibition room contains one of the largest collections of meteorites in the country; among the specimens, there are the famous mass of meteoric iron from Texas, weighing 1635 pounds; some hundreds of meteorites, large and small, all of which came from a single fall in Iowa, in May, 1879; the interesting Weston meteorite, which fell at Weston, Connecticut, in 1807, and was soon after described at length by Professors Silliman and Kingsley; besides many others of special interest. A case in the center of the room contains the large and beautiful collection of Chinese artistic work in stone, chiefly in Jade and Agate, with other like objects, bequeathed by Dr. S. Wells Williams, who was for forty-three years in China as Christian philanthropist, editor, author, and attaché to the American legation, and for some years before his decease occupied the chair of Professor of Chinese in the University. The large room on the same story adjoining the Mineral room, on the north side of the hall, is arranged for miner-

alogical and blowpipe instruction, with desks and a students' cabinet of minerals, and is under the charge of Mr. S. L. Penfield.

The second floor is given up to Geology and Palaeontology. The western exhibition room is occupied by a general collection of fossils, arranged for the most part in the order of the geological formations, and the southern by vertebrate fossils. The latter are mostly collections made by Professor Marsh, the larger part from regions west of the Mississippi, in Kansas, the states and territories of the Rocky mountain region, Oregon, etc. In the vertebrate room, the horizontal case to the left of the entrance contains a large suite of specimens of remains of the *toothed* birds—the *Hesperornis* and *Ichthyornis*—discovered by Professor Marsh in the Cretaceous rocks of Kansas; and near by in the first vertical case against the wall are the bones of a large *Mastodon* from Southern New York. In the center of the room there are a part of the bones of a gigantic *Dinosaur* from Wyoming, and, standing vertically, a large slab with the skeleton of a *Mosasaur* from Kansas. The horizontal case to the right of the entrance and the vertical case adjoining it against the west wall contain the remains of another *Dinosaur* about 30 feet long, which, as the specimens show, had ranges of very broad and thick plates, and one or two rows of immense spines, along the back. In the lower part of the next vertical case, lies a thigh-bone of an *Atlantosaurus* (the largest of *Dinosaurs*, and of land animals yet known), this bone having a length (when entire) of about seven feet. In a horizontal case on the south side of the same room there are, among the feet of various animals, the bones of the feet of three-toed and four-toed horses from the lower Tertiary of Wyoming. In two wall cases at the southeastern corner are the remains of the *Dinocerata*, huge mammals from the Eocene of Wyoming. In the second wall case on the east are the bones of the Miocene *Brontotheridae* from Dakota and Nebraska. Of the large collection of foot-prints belonging to the University, only

a few fine slabs are on exhibition, part of them in each of the two exhibition rooms of the second story. One of the most interesting is a slab about twelve feet long covered throughout with raindrop impressions, and, besides these, two lines of foot-prints of biped reptiles, one line of them extending the whole length of the slab.

The third story is occupied with the zoological collections so far as there is room for their exhibition. The general zoological collection occupies the western room ; and nearly the whole has been accumulated since Professor Verrill took charge of the department. The specimens are well arranged for exhibition and all labeled. Facing the south door stands a vertical case devoted to the Sponges, among which are many species of the siliceous or glass sponges (*Euplectella*, etc.). Beyond the sponges, twelve cases are filled with the collection of corals, which is one of the most extensive in the country. These are followed by the Echinoderms, etc. Several cases are devoted to a collection of the marine invertebrates of New England, which is nearly complete. Other cases contain special collections of the shells and corals of the Pacific Coast of America ; of the corals of Bermuda ; of the shells of Florida, etc. The collections are rich in species from the deep-sea dredgings in the Atlantic, but only a small part are on exhibition. Overhead are models, of natural size, of two of the huge Cephalopods of the world : one an Octopus from California, 28 feet in diameter (between the tips of opposite arms), and the other, nearer the door, a species of the Newfoundland seas, related to the Squids, having enormous eyes, and a length from the posterior extremity to the tip of the longer arms, of 42 feet. The models were made for the zoological department by Mr. J. H. Emerton.

The southern exhibition room of the zoological story contains a collection of skeletons in cases on its east and south sides, commencing near the door. These are deposited by Professor Marsh. The skeletons of Mammals, beginning with man and the apes, occupy all the east side ;

and then come the birds, reptiles, and fishes. The rest of the cases are occupied with collections of Vertebrates, both mounted and alcoholic, and include a nearly complete series of the species inhabiting New England.

The second and third stories have also large laboratories and work rooms, devoted to the department represented in the exhibition rooms of the story. Those of the second or geological story are in charge of Professor Marsh ; and those of the third or zoological story, besides serving for work rooms, are for the laboratory exercises and instruction of students in General Zoology under Professor Verrill, and in Biology and Comparative Anatomy under Professor Sidney I. Smith. These rooms contain also large collections of specimens arranged in drawers and trays, which are open to special students in the department.

In the fourth story there is a large Archaeological collection. As the funds of the Museum are restricted to the departments of Mineralogy, Geology, and Zoology, the cases of the old Yale Museum were fitted up for this collection.

The basement is devoted to work rooms and store rooms and contains a vast amount of specimens in the departments especially of Palaeontology and Zoology. This part of the building is always closed to visitors.

The exhibition rooms of the Museum are open between 9 A. M. and 6 P. M., except in the winter, when the hours are from 9 A. M. to 5 P. M. The janitor of the building is Mr. J. Rice, of 92 High street.

THE OBSERVATORY

BOARD OF MANAGERS

REV. TIMOTHY DWIGHT, D.D., LL.D., PRESIDENT
JACOB CAMPBELL, Esq.
PROFESSOR ELIAS LOOMIS, LL.D.
PROFESSOR CHESTER S. LYMAN, M.A.
PROFESSOR HUBERT A. NEWTON, LL.D., *Secretary*
THOMAS G. BENNETT, PH.B.
PROFESSOR CHARLES S. HASTINGS, PH.D.

OFFICERS

ROBERT BROWN, M.A., *Secretary*
WILLIAM L. ELKIN, PH.D., *Astronomer*
ASAPH HALL, JR., B.A., *Assistant Astronomer*

THE OBSERVATORY has been built from the avails of the gift of the late Hon. Oliver F. Winchester, of New Haven, on land given by the late Mrs. Cornelia L. Hillhouse and her daughters. The principal astronomical instruments now in use are a six-inch Heliometer constructed by Messrs. Repsold, of Hamburg, and an eight-inch Equatorial by Messrs. Grubb, of Dublin, given by Mr. Edward M. Reed, of New Haven.

Besides its ordinary astronomical work, the Observatory maintains two public services. Continuous time-signals are transmitted from the distributing clock at the Observatory to the railroads and other parties. The Observatory offers facilities also to persons interested in accurate Thermometry for the comparison of thermometers with standard instruments.

For the proper performance of these services the following equipment is in use :

1. Standard clocks, a transit instrument, chronographs, and the accessories for refined accuracy in the determination and transmission of time.

2. Apparatus for an extended (automatic) public time service.

3. Apparatus for research and comparison in Thermometry, including a collection of the best thermometers obtainable of the foreign makers and observatories which devote special attention to thermometric standards.

Descriptive circulars of the Thermometric service may be obtained by addressing the Observatory.

UNIVERSITY PRIZES

The JOHN A. PORTER PRIZE, of the value of two hundred and fifty dollars, established by the Kingsley Trust Association in 1872, is offered for the best English Essay on a prescribed subject. Competing essays must be handed in within one week after the close of the Spring Recess, and the award will be announced on Commencement Day. Any person who has been pursuing a regular course for a degree in any Department during the whole of the current College year, may compete for this prize. If none of the competing essays is of sufficient merit, the prize will not be awarded.

The subjects for essays in 1888 are as follows :—

1. The "Twa Friers of Berwick." (Discussion of authorship, comparison with Chaucer, and discussion of anti-friar satire.)
2. The Growth of the Love of Nature in English Poetry.
3. The Schismatic Tendency of Protestantism : Are its Effects evil ?
4. The Question of Empiricism and Intuitivism in the Field of Physiological Optics.
5. The Treatment of Criminals.
6. The Character and Condition of English Monasticism during the Century preceding the Dissolution of the Monasteries.
7. The Effects of the Connection with Hanover upon English History.
8. The Effects prior to 1862 of the Gold Discovery of 1848-51, upon Prices and Wages in the United States.
9. Political Parties in Cuba.

The Essays for 1888 will be due on Wednesday, April 11, at the office of the editor of the *New Englander*, No. 105 Grove street, New Haven.

The COBDEN CLUB SILVER MEDAL is awarded annually to that undergraduate of either the Academical or the Scientific Department who shows the greatest proficiency in the elements of Political Economy.

LISTS OF STUDENTS

DEPARTMENT OF PHILOSOPHY AND THE ARTS

COURSES OF GRADUATE INSTRUCTION

Frank Frost Abbott, B.A. } Yale University, 1882	<i>Redding</i>	153 F.
Lucius Franklin Badger, B.A. } Hamilton College, 1884	<i>Elmira, N. Y.</i>	285 York st.
Louis Lawrence Barnum, LL.B. } Yale University, 1886	<i>Thompsonville</i>	16 S. H.
John Bartholomew, PH.B. } Yale University, 1883	<i>Hudson, N. Y.</i>	A.
John Bennetto, B.A. } Yale University, 1887	<i>New Haven</i>	257 Orange st.
Malcom Booth, PH.B. } Yale University, 1879	<i>New Haven</i>	175 Oak st.
Edward Gaylord Bourne, B.A. } Yale University, 1883	<i>New Haven</i>	36 E.
Carleton Lewis Brownson, B.A. } Yale University, 1887	<i>New Canaan</i>	49 S. M.
Clarence Fassett Castle, M.A. } Denison University, 1883	<i>Granville, O.</i>	109 Elm st.
Mark Wilson Chunn, B.A. } Western Maryland College, 1882, B.D. Yale University, 1886	<i>Mechanicsville, Md.</i>	34 E.
George Francis Comstock, M.A. } Brown University, 1879, B.D. Yale University, 1882	<i>Woonsocket, R. I.</i>	12 Baldwin pl.
Clark Eugene Crandall, M.A. } Milton College, 1886	<i>Milton, Wisc.</i>	109 Elm st.
William Williams Crehore, B.A. } Yale University, 1886	<i>Cleveland, O.</i>	44 S. M.
Wilbur Lucius Cross, B.A. } Yale University, 1885	<i>Gurleyville</i>	58 S. M.
Anson Bartie Curtis, B.A. } University of Michigan, 1887	<i>River Junction, Wisc.</i>	92 Eaton st.
John Hubbard Curtis, B.A. } Yale University, 1887	<i>New Haven</i>	91 N. M.

Ira William Davenport, B.A. } Illinois College, 1885	Jacksonville, Ill. 1090 Chapel st.
Orville Henry Drake, M.A. } Bates College, 1884	Ashland, N. H. 242 York st.
George Edwin Eliot, Jr., B.A. } Yale University, 1886	Clinton 231 D.
Oliver Cummings Farrington, B.S. } Maine State Agricultural College	Portland, Me. 55 Prospect st.
Ernest Leonard Fox, B.A. } Syracuse University, 1881	North Western, N. Y. 92 Eaton st.
Harlow Stearns Gale, B.A. } Yale University, 1885	Minneapolis, Minn. 44 S. M.
George Francis Garneau, B.A. } St. Louis University, 1886	St. Louis, Mo. 132 Wall st.
Walter Greenwood Graves, B.A. } Yale University, 1886	New Haven 101 Grove st.
Asaph Hall, Jr., B.A. } Harvard University, 1882	New Haven Observatory
Horace Sedgwick Hart, B.A. } Yale University, 1887	New Haven 104 William st.
Edmund Otis Hovey, B.A. } Yale University, 1884	Bridgeport 90 N. M.
Washington Irving Hunt, B.A. } Yale University, 1886	Columbus, Mich. 57 S. M.
Fritz Jacobson, B.A. } Augustine College, 1885	Rockford, Ill. 49 Winchester av.
William Otterbein Krohn, } Western College	Indianapolis, Ind. 23 Lilac st.
David Denison Lambert, B.A. } Yale University, 1886	New Haven 163 Bradley st.
Elliot Cowdin Lambert, B.A. } Yale University, 1886	New York City 143 York st.
Yan Phou Lee, B.A. } Yale University, 1887	New Haven 24 Gilbert av.
John Winthrop Loveland, C.E. } Pennsylvania Milit. Acad., 1887	Pittston, Pa. 159 York st.
Harry Robert Lowrie, B.A. } Adrian College, 1885	Elgin, Ill. 134 College st.
Charles Henry Ludington, Jr., B.A. } Yale University, 1887	New York City 136 F.
Charles Wesley Lyon, Jr., PH.B. } Wesleyan University, 1886	Simsbury 117 Elm st.
Frank Gardner Moore, B.A. } Yale University, 1886	Columbus, O. 57 S. M.
Frederick Wightman Moore, B.A. } Yale University, 1886	New Haven 409 Temple st.
Rikizo Nakashima, B.A. } Western Reserve Univ. 1884, B.D. Yale University, 1887	Kiyoto, Japan 104 W.

Hanns Oertel, } Meissen Fürstenschule }	<i>Meissen, Germany</i>	193 Dixwell av.
William Henry Parks, B.A. } Yale University, 1886 }	<i>Clinton</i>	34 S. M.
John Wesley Payne, M.A. } Denison University, 1883 }	<i>New Haven</i>	69 Lyon st.
William Lyon Phelps, B.A. } Yale University, 1887 }	<i>New Haven</i>	Dwight Hall
James Pelham Pierpont, B.S. } Worcester Free Institute, 1887 }	<i>New Haven</i>	262 York st.
Louis Valentine Pirsson, PH.B. } Yale University, 1882 }	<i>New York City</i>	14 S. H.
John Norton Pomeroy, B.A. } Yale University, 1887 }	<i>San Francisco, Cal.</i>	83 Grove st.
Samuel Bostwick Robbins, PH.B. } Yale University, 1886 }	<i>Lakeville</i>	70 Howe st.
Harley Fish Roberts, B.A. } Western Reserve Univ. 1884 }	<i>Cleveland, O.</i>	38 Elm st.
James Johnston Robinson, B.A. } Princeton College, 1884 }	<i>Granville, O.</i>	106 N.
John Rogers, Jr., B.A. } Yale University, 1887 }	<i>New York City</i>	60 W.
Eben Charles Sage, B.A. } Shurtleff College, 1878 }	<i>New Haven</i>	57 Prospect st.
Frank Knight Sanders, B.A. } Ripon College, 1882 }	<i>Lakeville</i>	41 E.
James Alward Seymour, PH.B. } Yale University, 1885 }	<i>Auburn, N. Y.</i>	A.
Philemon Tecumseh Sherman, B.A. } St. Louis University, 1886 }	<i>St. Louis, Mo.</i>	59 Grove st.
Oscar Harmon Short, PH.B. } Yale University, 1887 }	<i>New York City</i>	88 Wall st.
Thomas William Smith, B.A. } Illinois College, 1886 }	<i>Jacksonville, Ill.</i>	1090 Chapel st.
Elias Hershey Sneath, M.A. } Lebanon Valley College, 1884, } S.D. Yale University, 1884 }	<i>Middletown</i>	Middletown
Erwin Starr Sperry, PH.B. } Yale University, 1887 }	<i>Ansonia</i>	Ansonia
George Stibbitz, M.A. } Ursinus College, 1887 }	<i>Lehighton, Pa.</i>	109 Elm st.
Calvert Townley, PH.B. } Yale University, 1886 }	<i>Cincinnati, O.</i>	A.
Henry Stephens Washington, B.A. } Yale University, 1886 }	<i>New Haven</i>	174 Orange st.
Herbert Henry White, B.A. } Yale University, 1885 }	<i>New Haven</i>	147 Humphrey st.
Wilbert Webster White, B.A. } Wooster University, 1881 }	<i>Wooster, O.</i>	104 Prospect st.

Alfred Munday Wilson, B.A. } Denison University, 1881	<i>Fox Lake, Wisc.</i>	133 Elm st.
Lillo Morgan Wood, B.A. } Mt. Union College, 1887	<i>Pittsburgh, Pa.</i>	29 High st.
George Stanley Woodward, B.A. } Yale University, 1887	<i>Wilkes-Barre, Pa.</i>	136 F.
Evans Woollen, B.A. } Yale University, 1886	<i>Indianapolis, Ind.</i>	187 C.
Benjamin Mead Wright, } Bangor Theol. Seminary	<i>Greenwich</i>	182 LYC.

GRADUATE STUDENTS, 69

ACADEMICAL DEPARTMENT

(YALE COLLEGE)

SENIOR CLASS

Edmund Allen	<i>St. Louis, Mo.</i>	223 D.
Hallock Calvin Alvord	<i>Gloversville, N. Y.</i>	242 L.
Edward Francis Ayres	<i>New Canaan</i>	255 L.
Charles Francis Baldwin	<i>New York City</i>	204 D.
William Pitt Baldwin	<i>New Haven</i>	32 Martin st.
Harry Beecher	<i>Tarrytown-on-Hudson, N. Y.</i>	220 D.
Jesse Hatch Behrends	<i>Brooklyn, N. Y.</i>	255 L.
Francis Bergstrom	<i>Minneapolis, Minn.</i>	116 N.
William Bascom Bissell	<i>Lakeville</i>	22 S.
Henry Whiting Boies	<i>Scranton, Pa.</i>	242 L.
Clayton Harcourt Brigham	<i>Savannah, Ga.</i>	224 D.
William Barrett Brinsmade	<i>Brooklyn, N. Y.</i>	180 LYC.
George Olney Brott	<i>Thompson</i>	273 L.
Louis Righter Brown	<i>Auburn, N. Y.</i>	249 L.
Henry Barnard Brownell	<i>Bristol</i>	103 N.
Philip Dibble Bunce	<i>Hartford</i>	250 L.
Winthrop Grant Bushnell	<i>New Haven</i>	244 L.
Arthur Kennard Buxton	<i>Brooklyn, N. Y.</i>	133 F.
William Campbell	<i>New York City</i>	251 L.
Laurance Johnson Carmalt	<i>New Haven</i>	251 L.
John Franklin Carter	<i>Orange, N. J.</i>	247 L.
Benjamin Austin Cheney	<i>New Haven</i>	45 Elm st.
William Spencer Clark	<i>Granby, Mass.</i>	262 L.
Harlan Ward Cooley	<i>Dubuque, Iowa</i>	245 L.
Charles Edward Cornwall	<i>New Haven</i>	43 Dwight pl.
Willis Gaylord Cosad	<i>Phelps, N. Y.</i>	147 F.
Harry Hall Covell	<i>Rochester, N. Y.</i>	155 F.
Samuel Monod Cross	<i>Westerly, R. I.</i>	135 F.
Thomas Burnham Enders	<i>Hartford</i>	262 L.
Edward Sherman Farrington	<i>Brooklyn, N. Y.</i>	173 F.
Edward Colton Fellowes	<i>Hartford</i>	41 S. M.
Dudley Ferguson	<i>Cincinnati, O.</i>	119 N.
Irving Fisher	<i>New Haven</i>	115 Park st.
William Howard Fitzgerald	<i>Chicago, Ill.</i>	248 L.
George Barber Fowler	<i>Thompsonville</i>	254 L.
Hervey Richards Franklin	<i>North Attleboro, Mass.</i>	151 F.

Asa Oran Gallup	<i>Oncida, N. Y.</i>	72 N. M.
George Metcalf Gill	<i>Orange, N. Y.</i>	258 L.
William Clark Gordon	<i>Wales, Mass.</i>	116 N.
Harold Russell Griffith	<i>Springfield, Mass.</i>	183 LYC.
Henry Huntley Haight	<i>Alameda, Cal.</i>	241 L.
Alfred Hand, Jr.	<i>Scranton, Pa.</i>	228 D.
Daniel Bailey Hardenbergh	<i>Port Jervis, N. Y.</i>	170 F.
Eugene Wendell Harter	<i>Albany, N. Y.</i>	169 F.
Frank Rufus Herrick	<i>Cleveland, O.</i>	249 L.
James Ormerod Heyworth	<i>Chicago, Ill.</i>	248 L.
Frank Wells Hubbard	<i>Litchfield</i>	149 F.
Dorr Albert Hudson	<i>Wakefield, Mass.</i>	Dwight Hall
Richard Melancthon Hurd	<i>New York City</i>	241 L.
Moses Jacob Husinsky	<i>New Haven</i>	84 N. M.
Orland Sidney Isbell	<i>New Haven</i>	116 Howe st.
John Couzu Kebabian	<i>Rodosto, Turkey</i>	99 N.
Charles Allen Klots	<i>Brooklyn, N. Y.</i>	135 F.
John Jacob Kutz	<i>Reading, Pa.</i>	246 L.
Wolcott Griswold Lane	<i>Sandusky, O.</i>	250 L.
Jesse Thomas Lazear	<i>Pittsburgh, Pa.</i>	179 LYC.
Theodore Lockwood Leverett	<i>Binghamton, N. Y.</i>	103 N.
Solomon Oliver Levinson	<i>Noblesville, Ind.</i>	161 York st.
Clarence Wyman Lincoln	<i>Philadelphia, Pa.</i>	139 F.
William Loving, Jr.	<i>St. Joseph, Mo.</i>	273 L.
Harry Weber McCauley	<i>Reading, Pa.</i>	272 L.
Charles Berghaus McConkey	<i>Harrisburg, Pa.</i>	149 F.
Joseph McElroy, Jr.	<i>Kansas City, Mo.</i>	184 York st.
James Howard McMillan	<i>Detroit, Mich.</i>	234 D.
William Davis Manro	<i>Auburn, N. Y.</i>	215 D.
Frederic William Mar	<i>West Haven</i>	99 N.
Gard Maynard	<i>Marquette, Mich.</i>	211 D.
Duncan Salisbury Merwin	<i>New Haven</i>	6 S.
Carl Meyer	<i>Chicago, Ill.</i>	264 L.
Frank Vincent Millard	<i>Tarrytown, N. Y.</i>	272 L.
Arthur Lewis Moore	<i>New York City</i>	247 L.
David Whipple Morison	<i>Minneapolis, Minn.</i>	224 D.
Charles Neave	<i>Cincinnati, O.</i>	246 L.
Harold VanMeter Ogden	<i>Chicago, Ill.</i>	151 F.
Irving Olmstead	<i>Stamford</i>	167 F.
Frederic Holmes Paine	<i>Bangor, Me.</i>	175 F.
Lucius Noyes Palmer	<i>Brooklyn, N. Y.</i>	24 S.
William Andrews Parshall	<i>Port Jervis, N. Y.</i>	170 F.
Edwin Parsons	<i>New York City</i>	231 D.
George Madison Pavey	<i>Washington C. H., O.</i>	105 N.
Harrison Gray Platt	<i>Milford</i>	54 S. M.

Frederic Hopkins Pomroy	<i>Lockport, N. Y.</i>	204 D.
Edward Pond	<i>San Francisco, Cal.</i>	217 D.
Phillip Pond	<i>New Haven</i>	105 N.
Herbert Warren Porter	<i>Bridgeport</i>	25 S.
Alfred Raymond	<i>Brooklyn, N. Y.</i>	139 F.
Thomas Emerson Ripley	<i>Rutland, Vt.</i>	245 L.
Samuel Sidney Breese Roby	<i>Rochester, N. Y.</i>	256 L.
Thomas Frederic Sanford	<i>Redding</i>	211 D.
James Robert Seeley	<i>Bridgeport</i>	25 S.
William Henry Seward, Jr.	<i>Auburn, N. Y.</i>	178 LYC.
Fred Palmer Solley	<i>Orange, N. Y.</i>	258 L.
Amos Alonzo Stagg	<i>Orange, N. Y.</i>	Dwight Hall
Leo Stein	<i>Chicago, Ill.</i>	264 L.
Bernard Christian Steiner	<i>Baltimore, Md.</i>	169 F.
Henry Ebenezer Stevens, Jr.	<i>New York City</i>	72 N. M.
Edward Albert Stevenson	<i>Brooklyn, N. Y.</i>	203 D.
Frederic Augustus Stevenson	<i>Brooklyn, N. Y.</i>	203 D.
Henry Lewis Stimson	<i>New York City</i>	256 L.
William Stephen Stone	<i>New Britain</i>	221 D.
John Hudson Storer	<i>Norwich</i>	137 F.
Henry Strunz	<i>Bristol</i>	104 N.
Eliphalet Bradford Terry	<i>Brooklyn, N. Y.</i>	212 D.
Edward Seymour Thomas	<i>Providence, R. I.</i>	228 D.
Hector William Thomas	<i>New York City</i>	24 S.
Frank Lincoln Thompson	<i>Denver, Col.</i>	181 LYC.
Frank Burr Tibbals	<i>New Haven</i>	6 S.
Edward Montclair Tillinghast	<i>Hope Valley, R. I.</i>	259 L.
Elbert Reynolds Tillinghast	<i>Hope Valley, R. I.</i>	259 L.
Herbert Cushing Tolman	<i>Hanover, Mass.</i>	173 F.
Winthrop Turney	<i>Astoria, N. Y.</i>	64 W.
Willard Lamb Velie	<i>Moline, Ill.</i>	222 D.
Fred Ayer Verplanck	<i>Franklin</i>	147 F.
William Miller Vinton	<i>Provincetown, Mass.</i>	215 D.
Morison Remich Waite, Jr.	<i>Toledo, O.</i>	178 LYC.
Samuel Johnson Walker	<i>Chicago, Ill.</i>	223 D.
Brownlee Robertson Ward	<i>New Haven</i>	138 Temple st.
William Drew Washburn, Jr.	<i>Minneapolis, Minn.</i>	269 L.
Asher Miner Wellman	<i>Friendship, N. Y.</i>	257 L.
Monroe Nichols Wetmore	<i>Lebanon</i>	174 F.
Arthur White	<i>Brooklyn, N. Y.</i>	220 D.
Porter Gouverneur Willett	<i>Buffalo, N. Y.</i>	222 D.
Frank Lincoln Woodward	<i>Denver, Col.</i>	227 D.
Ephraim Miller Youmans	<i>New York City</i>	257 L.

JUNIOR CLASS

Burr Reeve Abbe, Jr.	<i>Hartford</i>	281 L.
William Pope Aiken	<i>Rutland, Vt.</i>	74 N. M.
Joshua Wilson Allen	<i>Hartford</i>	221 D.
William Whitney Ames	<i>Rockville</i>	26 S.
William Lucius Armstrong	<i>Cleveland, O.</i>	120 N.
Henry Cornelius Atkins	<i>Indianapolis, Ind.</i>	278 L.
Arnold Plumer Austin	<i>Philadelphia, Pa.</i>	252 L.
Freeman Davidson Baerman	<i>Gouverneur, N. Y.</i>	189 C.
John Wallace Banks	<i>Guilford</i>	124 N.
Donald McLean Barstow	<i>Flushing, N. Y.</i>	131 High st.
Horace Bennet Bartholomew	<i>Pottsville, Pa.</i>	166 F.
John William Beckwith	<i>Chicago, Ill.</i>	282 L.
Ernest Smith Bishop	<i>Guilford</i>	88 N. M.
Dwight Walter Bissell	<i>Ahmednagar, India</i>	7 S.
Lester Bradner, Jr.	<i>New Haven</i>	55 S. M.
Walter Shaw Brewster	<i>Brooklyn, N. Y.</i>	176 F.
Charles Twing Brooks	<i>Salem, O.</i>	39 S. M.
Philip Embury Browning	<i>Poughkeepsie, N. Y.</i>	9 S.
Thomas Walter Buchanan	<i>Albany, Vt.</i>	101 N.
Hillhouse Buel	<i>Asheville, N. C.</i>	67 N. M.
Augustus Coburn	<i>Indianapolis, Ind.</i>	232 D.
George Coggill	<i>New York City</i>	210 D.
Albert St.Clair Cook	<i>Hartford</i>	227 D.
Howard Copland	<i>Columbus, O.</i>	106 N.
William Herbert Corbin	<i>Hartford</i>	100 N.
Safford Arnold Crummey	<i>Poughkeepsie, N. Y.</i>	226 D.
Thomas Mitchel Cullinan	<i>Bridgeport</i>	26 S.
John Havemeyer Daniels	<i>Ocean Grove, N. J.</i>	439 George st.
Wm. Chester DeForest Dickinson	<i>New Haven</i>	112 Asylum st.
Thomas Elliott Donnelley	<i>Chicago, Ill.</i>	164 F.
George Perkins Douglas	<i>Minneapolis, Minn.</i>	217 D.
Eugene Henry Dupée	<i>Chicago, Ill.</i>	144 F.
Frederick Wesley Ellis	<i>Ansonia</i>	9 S.
Joseph Ralph Ensign	<i>Simsbury</i>	164 F.
Joseph Grant Ewing	<i>Harrisburg, Pa.</i>	265 L.
Samuel Herbert Fisher	<i>Cincinnati, O.</i>	202 D.
Claude Lamot Forbes	<i>Canastota, N. Y.</i>	226 D.
Leopold Joseph Francke	<i>New York City</i>	237 D.
Albert Myrick Freeman	<i>Provincetown, Mass.</i>	101 N.
John Randolph Galt	<i>Newburgh, N. Y.</i>	237 D.
Edward James Gavegan	<i>New Haven</i>	37 S. M.
Charles Otis Gill	<i>Orange, N. J.</i>	202 D.

Porter Beach Godard	<i>North Granby</i>	8 S.
John Cornelius Griggs	<i>Terryville</i>	100 N.
Thomas Hanlon, Jr.	<i>Pennington, N. Y.</i>	71 N. M.
Charles Hegamin, Jr.	<i>Troy, N. Y.</i>	480 Elm st.
Edward Barrett Hinckley	<i>Northampton, Mass.</i>	47 S. M.
Howland Hoadley	<i>New York City</i>	265 L.
Leverett Lord Hull	<i>Cincinnati, O.</i>	252 L.
Joseph Selden Huntington, Jr.	<i>Old Lyme</i>	176 F.
Robert Watkinson Huntington, Jr.	<i>Hartford</i>	239 D.
Arthur May Hyde	<i>Rockville</i>	107 N.
Baruch Israeli	<i>New Haven</i>	188 C.
Benjamin Willard Jacobs	<i>Denver, Col.</i>	38 S. M.
Arthur Edmands Jenks	<i>Brockton, Mass.</i>	122 N.
James Henry Keefe	<i>Chester, Mass.</i>	216 D.
Charles Foster Kent	<i>Palmyra, N. Y.</i>	277 L.
Charles Sherman King	<i>Wabash, Ind.</i>	134 F.
George Lyman Lamphier	<i>Goshen</i>	190 C.
Charles Chandler Griswold Lane	<i>Sandusky, O.</i>	8 S.
Charles William Leffer	<i>Cincinnati, O.</i>	68 N. M.
Milton Marshall Lemer	<i>Harrisburg, Pa.</i>	104 N.
Elmer Francis Letcher	<i>Southbridge, Mass.</i>	3 S.
Fred Nye Lindsay	<i>Troy, N. Y.</i>	84 N. M.
Edward Olaus Loe	<i>Grand Meadow, Minn.</i>	190 C.
Joseph Wilson Lucas	<i>Philadelphia, Pa.</i>	225 D.
Robert Lee Luce	<i>Hartwick, N. Y.</i>	216 D.
Eugene Emile McCandliss	<i>Philadelphia, Pa.</i>	266 L.
Joseph Sprigg McMahon	<i>Dayton, O.</i>	233 D.
William Adolphe McQuaid	<i>New Haven</i>	181 Orchard st.
Henry Eager Mason	<i>Chicago, Ill.</i>	43 S. M.
William Ross Matson	<i>Hartford</i>	42 S. M.
Mark Edward Merrifield	<i>New York City</i>	172 F.
John Fuller Appleton Merrill	<i>Portland, Me.</i>	282 L.
William Clifford Moore	<i>New York City</i>	266 L.
Augustus Henry Mosle	<i>New York City</i>	206 D.
Harry Ford Noyes	<i>Georgetown, Mass.</i>	120 N.
John Ball Osborne	<i>Wilkes-Barre, Pa.</i>	129 F.
William Herbert Page	<i>Ironton, O.</i>	163 F.
Edward Lambe Parsons	<i>New Rochelle, N. Y.</i>	280 L.
Charles Cook Paulding	<i>Peekskill, N. Y.</i>	163 F.
George Clarke Peck	<i>Brooklyn, N. Y.</i>	130 F.
Israel Hyman Peres	<i>Memphis, Tenn.</i>	85 N. M.
Gordon Brainerd Pike	<i>Middletown</i>	201 D.
Gifford Pinchot	<i>New York City</i>	280 L.
Robert Treat Platt	<i>Milford</i>	54 S. M.
Samuel Newman Pond	<i>Falls Church, Va.</i>	12 S.

Harry Lathrop Reed	<i>Manchester, Vt.</i>	69 N. M.
Charles G. Reynolds	<i>Wolcott, N. Y.</i>	124 N.
Oliver Huntington Richardson	<i>New Britain</i>	281 L.
Henry Seymour Robinson	<i>Hartford</i>	238 D.
William Hayden Rockwell	<i>New York City</i>	206 D.
James Gamble Rogers	<i>Chicago, Ill.</i>	278 L.
Henry Judson Sage	<i>Cincinnati, O.</i>	274 L.
Frederic Henry Sanford	<i>Palmyra, N. Y.</i>	277 L.
William Davis Sawyer	<i>Dover, N. H.</i>	201 D.
Ferdinand Schwill	<i>Cincinnati, O.</i>	46 S. M.
Edmund Daniel Scott	<i>New Haven</i>	12 S.
Frederick Andrew Scott	<i>Terryville</i>	88 N. M.
Edward Ewing Sears	<i>Northampton, Mass.</i>	11 S.
Thomas Gaskell Shearman	<i>Brooklyn, N. Y.</i>	53 S. M.
Charles Hitchcock Sherrill	<i>Washington, D. C.</i>	235 D.
Charles Sanford Skilton	<i>Northampton, Mass.</i>	11 S.
Herbert Augustine Smith	<i>Worcester, Mass.</i>	46 S. M.
Samuel Lewis Smith	<i>Cleveland, O.</i>	225 D.
Langdon Trufant Snipe	<i>Bath, Me.</i>	166 F.
Horace Sheldon Stokes	<i>Detroit, Mich.</i>	238 D.
Lewis Austin Storrs	<i>Hartford</i>	141 F.
Joseph Parsons Tuttle	<i>Hartford</i>	85 N. M.
John Underhill	<i>Bath, N. Y.</i>	274 L.
Charles Abernethy Valentine	<i>New York City</i>	130 F.
Howard Wills Vernon	<i>Brooklyn, N. Y.</i>	233 D.
Horace Fletcher Walker	<i>Detroit, Mich.</i>	172 F.
Frederic William Wallace	<i>Ansonia</i>	234 D.
Thomas Pinckney Waring	<i>Savannah, Ga.</i>	134 F.
Charles Milnor Washington	<i>New Haven</i>	210 D.
Lewis Sheldon Welch	<i>Hartford</i>	239 D.
Hubert Wetmore Wells	<i>Louisville, Ky.</i>	92 N. M.
Philip Patterson Wells	<i>Louisville, Ky.</i>	92 N. M.
DeWitt Clinton West	<i>Lowville, N. Y.</i>	232 D.
Edmund Burr White	<i>Holbrook, Mass.</i>	129 F.
James Thomas Whittlesey	<i>Washington, D. C.</i>	53 S. M.
Howard Hunter Williams	<i>North Adams, Mass.</i>	132 F.
William Carver Williams	<i>Cleveland, O.</i>	122 N.
Andrew Ludwig Winters	<i>Reading, Pa.</i>	7 S.
George Washington Woodruff	<i>Scranton, Pa.</i>	69 N. M.
Horace Wylie	<i>Washington, D. C.</i>	235 D.

SOPHOMORE CLASS

Jacob Jay Abt	<i>Chicago, Ill.</i>	56 S. M.
George Loveless Amerman	<i>Syracuse, N. Y.</i>	268 L.
Edgar Ames	<i>St. Louis, Mo.</i>	63 S. M.
Maximilian Baird	<i>Chicago, Ill.</i>	159 F.
Roger Sherman Baldwin	<i>New Haven</i>	44 Wall st.
Frank Pennington Ball	<i>New York City</i>	64 S. M.
James Robertson Barbour	<i>New Haven</i>	146 F.
Harry Jenkins Bardwell	<i>Tunkhannock, Pa.</i>	27 S.
Thomas Francis Bayard, Jr.	<i>Wilmington, Del.</i>	90 High st.
William Hale Beckford	<i>Orange, N. Y.</i>	192 C.
Frederick Bedell	<i>Montclair, N. Y.</i>	1 S.
Albert Bingley Bennett	<i>Williamson, N. Y.</i>	191 C.
Frank Stymets Bishop	<i>New Haven</i>	61 Lyon st.
Herbert Morton Bishop	<i>New Haven</i>	146 F.
Charles Bemis Bliss	<i>Abington</i>	97 N.
Charles Wright Boltwood	<i>New Haven</i>	77 Wall st.
*James Howard Bonbright	<i>Philadelphia, Pa.</i>	
Charles Cranston Bovey	<i>Minneapolis, Minn.</i>	218 D.
Frank Eli Bradley	<i>Quincy, Ill.</i>	4 S.
John Williams Brady	<i>Warsaw, N. Y.</i>	45 S. M.
Edward Brooks, Jr.	<i>Philadelphia, Pa.</i>	1010 Chapel st.
Frank Terry Brooks	<i>New Haven</i>	141 Edwards st.
William Thurston Brown	<i>Eddytown, N. Y.</i>	66 N. M.
Gouverneur Calhoun	<i>Chicago, Ill.</i>	2 S.
George Henry Capen	<i>St. Louis, Mo.</i>	152 F.
Bert Francis Case	<i>Granby</i>	73 N. M.
Amasa Day Chaffee	<i>Moodus</i>	140 F.
Howard Dennis Collins	<i>Newport, R. I.</i>	223 York st.
Arthur Willis Colton	<i>Warren</i>	4 S.
John White Corwith	<i>Chicago, Ill.</i>	48 S. M.
Howard Elmer Crall	<i>New York City</i>	263 L.
Robert Dillon Crane	<i>New York City</i>	209 D.
Albert Cushing Crehore	<i>Cleveland, O.</i>	13 S.
John Crosby, Jr.	<i>Minneapolis, Minn.</i>	218 D.
George Henry Danforth	<i>Madison, N. Y.</i>	154 F.
Arthur Pomeroy Day	<i>Hartford</i>	17 S.
Walter Alden DeCamp	<i>Cincinnati, O.</i>	159 F.
Walton Dennis	<i>Brooklyn, N. Y.</i>	156 F.
Andrew Glassell Dickinson, Jr.	<i>New York City</i>	165 F.
George Wells Dupee	<i>Chicago, Ill.</i>	144 F.
Louis Cazenove duPont	<i>Wilmington, Del.</i>	61 S. M.

* Died October 31, 1887.

Clark Terry Durant	<i>Albany, N. Y.</i>	261 L.
Charles Dussler	<i>Clyde, N. Y.</i>	40 S. M.
Charles Albert Ebersole	<i>Cincinnati, O.</i>	10 S.
Wolcott Webster Ellsworth	<i>Hartford</i>	111 York st.
Arthur Espy	<i>Cincinnati, O.</i>	16 S.
John Dorrance Farnham	<i>Wilkes-Barre, Pa.</i>	116 High st.
Horace Cheney Foote	<i>New York City</i>	140 F.
Henry Thatcher Fowler	<i>Poughkeepsie, N. Y.</i>	18 S.
George William Gedney	<i>Newburgh, N. Y.</i>	17 Wooster pl.
George Hills Gilman	<i>Hartford</i>	142 F.
Rodney Lawrence Glisan	<i>Portland, Oregon</i>	14 S.
William Brownell Goodwin	<i>Hartford</i>	81 N. M.
Henry Champlin Graves	<i>Dayton, O.</i>	10 S.
William Sherman Greene	<i>Brooklyn, N. Y.</i>	209 D.
Elihu Marvin Griswold	<i>Erie, Pa.</i>	65 W.
Charles Humphrey Hamill	<i>Chicago, Ill.</i>	48 S. M.
Bert Hanson	<i>Great Falls, N. H.</i>	27 S.
William Harmar	<i>Philadelphia, Pa.</i>	1010 Chapel st.
Reginald Fairfax Harrison	<i>New York City</i>	1010 Chapel st.
Charles Houston Haskell	<i>Norwich</i>	263 L.
Lewis Scofield Haslam	<i>Stamford</i>	13 S.
George Collier Hitchcock	<i>St. Louis, Mo.</i>	90 High st.
George Day Holmes	<i>Montclair, N. J.</i>	1 S.
Roland Holt	<i>New York City</i>	123 N.
George Henry Hotaling	<i>San Francisco, Cal.</i>	238 York st.
Addison Hills Hough	<i>Cleveland, O.</i>	64 S. M.
May Humphreys	<i>New York City</i>	17 S.
George Arthur Hurd	<i>New York City</i>	143 F.
Otis King Hutchinson	<i>Chicago, Ill.</i>	145 F.
John DeCourcy Ireland	<i>New York City</i>	1010 Chapel st.
Robert Livingston Ireland	<i>New York City</i>	1010 Chapel st.
James Monfort Irvin	<i>Dayton, O.</i>	168 F.
John Day Jackson	<i>New York City</i>	160 F.
Norman James	<i>Baltimore, Md.</i>	62 S. M.
Elliott Proctor Joslin	<i>Oxford, Mass.</i>	18 S.
Charles Poole Kellogg	<i>Waterbury</i>	143 F.
Chester Henry Keogh	<i>Chicago, Ill.</i>	15 S.
Elmo Henry Keyes	<i>New York City</i>	121 York st.
Yale Kneeland	<i>Brooklyn, N. Y.</i>	15 S.
Stephen Hurlburt Kohler	<i>Akron, O.</i>	168 F.
William Alfred Korn	<i>Norwich</i>	59 S. M.
George Newton Lawson	<i>Union</i>	3 S.
Harriman Willis Lee	<i>Buffalo, N. Y.</i>	1010 Chapel st.
Charles Fitch Lester	<i>Norwich</i>	97 N.
Thomas Jay Lloyd	<i>East Orange, N. J.</i>	193 C.

James Locke	<i>Buffalo, N. Y.</i>	1002 Chapel st.
Walter Irenæus Lowe	<i>Whitinsville, Mass.</i>	73 N. M.
William Chittenden Lusk	<i>New York City</i>	23 S.
Abram Garrison McClintock	<i>Allegheny, Pa.</i>	90 High st.
William Appleton McConnel	<i>Beaver, Pa.</i>	60 S. M.
Donald McCormick	<i>Harrisburg, Pa.</i>	148 F.
Ralph Augustine McDonnell	<i>New Haven</i>	266 Portsea st.
Thomas Edward McEvoy	<i>Hopkinton, Mass.</i>	76 N. M.
John Francis McGuire	<i>Hopkinton, Mass.</i>	76 N. M.
Henry Latham Magruder	<i>Chicago, Ill.</i>	A.
Henry Smith Mathewson	<i>Pomfret</i>	113 N.
Solomon Cristy Mead	<i>Greenwich</i>	182 LYC.
Frank Sherman Meara	<i>Cottage City, Mass.</i>	60 S. M.
Robert Hale Merriam	<i>St. Paul, Minn.</i>	243 L.
Knowlton Mixer	<i>Buffalo, N. Y.</i>	165 F.
Richard Bartholomew Moriarty	<i>Putnam</i>	113 N.
Samuel Benjamin Morison	<i>Minneapolis, Minn.</i>	98 N.
William Greenwood Morris	<i>New Haven</i>	408 Crown st.
Sidney Nelson Morse	<i>North Woodstock</i>	107 N.
Harry Loomis Munger	<i>Dayton, O.</i>	214 D.
Edward Lyman Munson	<i>New Haven</i>	14 S.
Ashbel Barney Newell	<i>Chicago, Ill.</i>	61 S. M.
George Nathan Newman	<i>Buffalo, N. Y.</i>	12 Whalley av.
Henry Opdyke	<i>Plainfield, N. J.</i>	154 F.
Willard Parker, Jr.	<i>New York City</i>	138 F.
Herbert Parsons	<i>New York City</i>	138 F.
Richard Truman Percy	<i>New Haven</i>	214 D.
George Frederick Peter	<i>St. Louis, Mo.</i>	28 S.
Stowe Phelps	<i>Brooklyn, N. Y.</i>	1010 Chapel st.
Robert Eston Phyfe	<i>Delhi, N. Y.</i>	219 York st.
Eugene Rockwell Pike	<i>Chicago, Ill.</i>	133 College st.
Nathan Todd Porter, Jr.	<i>Montclair, N. J.</i>	156 F.
Harry Elbridge Pratt	<i>Chicago, Ill.</i>	56 S. M.
George Wadsworth Raynes	<i>Charlestown, Mass.</i>	254 York st.
Charles Eliphalet Robbins	<i>Ruskey, N. Y.</i>	192 C.
Frederick William Robinson	<i>Auburn, N. Y.</i>	45 S. M.
Stuart Henry Rowe	<i>New Haven</i>	30 Academy st.
Henry Manning Sage	<i>Albany, N. Y.</i>	1010 Chapel st.
Leonard Cutler Sanford	<i>New Haven</i>	216 Crown st.
Daniel David Scharps	<i>Newburgh, N. Y.</i>	131 F.
Henry Leo Scheuerman	<i>Griffin, Ga.</i>	131 F.
Ernest Lynde Selden	<i>Hadlyme</i>	41 High st.
Howard Van Doren Shaw	<i>Chicago, Ill.</i>	261 L.
Thomas Bond Shaw	<i>Worcester, Mass.</i>	59 S. M.
Charles Alexander Sheldon	<i>Rutland, Vt.</i>	63 S. M.

Edward Minot Shelton	<i>Litchfield</i>	191 C.
John Howard Sherwood	<i>Englewood, N. Y.</i>	148 F.
Wallace Delafield Simmons	<i>St. Louis, Mo.</i>	152 F.
Charles Francis Small	<i>Pawtucket, R. I.</i>	186 C.
William Henry Smith	<i>New Haven</i>	28 S.
William Howard Smith	<i>Ogden City, Utah</i>	40 S. M.
Percy Hamilton Stewart	<i>Plainfield, N. Y.</i>	157 F.
John Francis Sullivan	<i>New Haven</i>	304 Exchange st.
James Willcox Thompson	<i>Bridgeport</i>	142 F.
Ralph Thompson	<i>Schenectady, N. Y.</i>	1010 Chapel st.
Albert Arthur Tilney	<i>Plainfield, N. Y.</i>	1010 Chapel st.
Evarts Tracy	<i>Plainfield, N. Y.</i>	157 F.
Henry Veeder	<i>Chicago, Ill.</i>	35 High st.
Horace Garfield Waite	<i>Chicago, Ill.</i>	133 College st.
James Allen Warner	<i>Albany, N. Y.</i>	1010 Chapel st.
George Swift Welch	<i>Gowanda, N. Y.</i>	1002 Chapel st.
Edwin Stanley Welles	<i>Newington</i>	90 N. M.
William White, Jr.	<i>Drifton, Pa.</i>	2 S.
Albert Jason Willson	<i>Marion, Ind.</i>	35 High st.
Joseph Lafon Winchell	<i>New Haven</i>	313 Orange st.
Lewis Bartholomew Woodruff	<i>New York City</i>	23 S.
Henry Sterne Woodward	<i>Washington, D. C.</i>	16 S.
George Dallas Yeomans	<i>East Aurora, N. Y.</i>	1010 Chapel st.
Samuel Albert York, Jr.	<i>New Haven</i>	145 F.

SOPHOMORES, 155

FRESHMAN CLASS

Edward Walter Abell	<i>North Franklin</i>	157 Orange st.
Hildreth James Ackroyd	<i>Albany, N. Y.</i>	108 N.
George Irving Adams	<i>Westborough, Mass.</i>	77 N. M.
Thomas Gove Adams	<i>New Haven</i>	146 College st.
Alfred Lawrence Aiken	<i>Norwich</i>	270 L.
Matthias Charles Arnot	<i>Elmira, N. Y.</i>	219 D.
Grosvenor Atterbury	<i>New York City</i>	260 L.
Harry Eugene Avery	<i>Detroit, Mich.</i>	1090 Chapel st.
Gurdon Franklin Bailey	<i>Groton</i>	110 N.
Albert Ruggles Baker	<i>Hartford</i>	34 S. M.
Frederick Herbert Baker	<i>Billerica, Mass.</i>	80 N. M.
Ernest Hickok Baldwin	<i>Cheshire</i>	200 York st.
Cecil Kittredge Bancroft	<i>Andover, Mass.</i>	279 L.

Albert Hampton Barclay	<i>Pittsburgh, Pa.</i>	35 High st.
John Sanford Barnes, Jr.	<i>New York City</i>	126 High st.
James Foote Barnett	<i>Grand Rapids, Mich.</i>	29 S.
Walter Alden Barrows	<i>Westborough, Mass.</i>	77 N. M.
William Tenney Bartley	<i>Bridgeport</i>	127 N.
Frank Sheridan Benninghoff	<i>Clyde, N. Y.</i>	251 Crown st.
Louis Frederic Holbrook Betts	<i>New York City</i>	208 D.
David Lane Billings	<i>New York City</i>	162 F.
Henry Mortimer Billings	<i>New York City</i>	233 York st.
William Edward Billings	<i>New York City</i>	231 York st.
Walter Kissam Birdsall	<i>Jersey City, N. J.</i>	120 York st.
Edwin Whitney Bishop	<i>Norwich</i>	110 N.
Edward Clarence Bissell	<i>Lakeville</i>	22 S.
Frank Sandford Blair	<i>Angelica, N. Y.</i>	1179 Chapel st.
James Kingsley Blake	<i>New Haven</i>	361 Temple st.
Elijah George Boardman	<i>Cleveland, O.</i>	84 Wall st.
John Alden Bovey	<i>Minneapolis, Minn.</i>	31 S.
Joseph Bowden, Jr.	<i>New Haven</i>	122 Rosette st.
William Lewis Bradley	<i>New Haven</i>	139 Chestnut st.
Charles Edwin Brainard	<i>Hartford</i>	242 York st.
John Matthews Brenner	<i>Dayton, O.</i>	133 College st.
George Stephenson Brewster	<i>New York City</i>	254 York st.
James Wallace Broatch	<i>Omaha, Nebr.</i>	159 York st.
Benjamin West Bonney Brown	<i>New York City</i>	38 High st.
Charles Marshall Brown	<i>Pittsburgh, Pa.</i>	223 York st.
Frank Theodore Brown	<i>Albany, N. Y.</i>	108 N.
William Arthur Brown	<i>Fitchburg, Mass.</i>	139 Elm st.
John Henry Buck	<i>Hartford</i>	161 F.
John Lee Bunce	<i>Hartford</i>	161 F.
Curtis Clark Bushnell	<i>New Haven</i>	19 Perkins st.
Levi Ives Bushnell	<i>New Haven</i>	49 Howe st.
Charles Gibbs Carter	<i>Titusville, Pa.</i>	30 S.
Ernest Chadwick	<i>Lyme</i>	78 N. M.
Starling Winston Childs	<i>Pittsburgh, Pa.</i>	223 York st.
Alfred Mainwaring Coats	<i>Providence, R. I.</i>	109 Wall st.
Samuel Colgate, Jr.	<i>Orange, N. J.</i>	252 York st.
Charles Parsons Cooley	<i>Hartford</i>	168 York st.
William Russell Cone Corson	<i>Hartford</i>	242 York st.
John Joughin Cox	<i>Bedford, N. Y.</i>	84 Wall st.
Frank Crawford	<i>Colebrook, N. H.</i>	65 N. M.
Harvey Williams Cushing	<i>Cleveland, O.</i>	166 York st.
Will Sage Dalzell	<i>Pittsburgh, Pa.</i>	217 York st.
Edgar William Danner	<i>Paterson, N. J.</i>	174 F.
Henry Murray Dater	<i>Brooklyn, N. Y.</i>	252 York st.
Carroll Preston Davis	<i>Pittsburgh, Pa.</i>	1081 Chapel st.

Clarence Seward Davis	<i>Jersey City, N. J.</i>	112 N.
William Beach Dean	<i>New York City</i>	128 N.
Lyle Alexander Dickey	<i>Haiku, Maui, H. I.</i>	111 N.
Frank Ayer Dillingham	<i>Summit, N. J.</i>	328 Temple st.
John Wesley Doane, Jr.	<i>Chicago Ill.</i>	70 Grove st.
Walter Phelps Dodge	<i>New York City</i>	42 Elm st.
Edward Payson Drew	<i>McIndoes Falls, Vt.</i>	82 N. M.
Henry Dunnell	<i>New York City</i>	78 N. M.
Richard Bancker Duyckinck, Jr.	<i>Brooklyn, N. Y.</i>	192 York st.
Charles Russell Ely	<i>Frederick City, Md.</i>	126 N.
Malcolm Monteith Ely	<i>Elyria, O.</i>	1090 Chapel st.
Joe Garner Estill	<i>Winchester, Tenn.</i>	43 Whalley av.
Herbert Edward Farmer	<i>Andover, Mass.</i>	409 Temple st.
James Eugene Farmer	<i>Cleveland, O.</i>	46 Elm st.
Harry Tristram Ferris	<i>Riverside</i>	94 N. M.
Parnell Ellis Fisher	<i>Hope Valley, R. I.</i>	161 Orange st.
Russell Kennedy Forsyth	<i>Allegheny, Pa.</i>	223 York st.
Harry Gardner Foster	<i>St. Paul, Minn.</i>	98 N.
Reginald Foster	<i>New York City</i>	253 L.
Raymond Hilliard Gage	<i>Dover, N. J.</i>	82 N. M.
Nathan Glicksman	<i>Chippewa Falls, Wisc.</i>	282 George st.
De Forest Grant	<i>New York City</i>	252 York st.
William Phillips Graves	<i>Andover, Mass.</i>	279 L.
Ashbel Green, Jr.	<i>Tenafly, N. J.</i>	208 D.
Paul Ecoff Greer	<i>Chicago, Ill.</i>	128 High st.
Franklin Underwood Gregory	<i>Brooklyn, N. Y.</i>	237 Orange st.
Hippolyte Washington Gruener	<i>New Haven</i>	39 Whiting st.
Thomas Hackett Guy	<i>Troy, N. Y.</i>	312 George st.
Stansbury Tiffany Hager	<i>Brooklyn, N. Y.</i>	113 York st.
Edwin Victor Hale	<i>Cleveland, O.</i>	271 L.
Charles Howard Hall	<i>Exeter, N. H.</i>	80 N. M.
Lewis Carroll Hall	<i>New Canaan</i>	569 Elm st.
Lane Schofield Hart	<i>Harrisburg, Pa.</i>	121 York st.
Theodore Stuart Hart	<i>Farmington</i>	136 College st.
Perry Williams Harvey	<i>Cleveland, O.</i>	166 York st.
George Pickard Hawkes	<i>New Haven</i>	314 Crown st.
Joseph Eugene Hedges	<i>Oregon City, Oregon</i>	79 N. M.
George Henry Hefflon	<i>Deep River</i>	20 S.
Joseph Rogers Herod	<i>Indianapolis, Ind.</i>	75 N. M.
Russell Day Hill	<i>Chicago, Ill.</i>	149 College st.
William Thurston Hincks	<i>Bridgeport</i>	65 N. M.
George Walter Hodges	<i>Bristol</i>	43 Whalley av.
Frank Sheridan Hoefler	<i>Iliom, N. Y.</i>	238 York st.
Herbert Wolcott Holcomb	<i>Portland, Oregon</i>	174 George st.
Louis Lawton Hopkins	<i>Providence, R. I.</i>	192 York st.

Gerard Beekman Hoppin	<i>New York City</i>	203 York st.
Edward Franklin Horr	<i>Bridgeport</i>	127 N.
Hampton Pierson Howell	<i>West Hampton Center, N. Y.</i>	128 N.
Charles Prentice Howland	<i>New York City</i>	158 F.
James Coleman Ford Huntington	<i>New York City</i>	332 Temple st.
Robert Palmer Huntington, Jr.	<i>New York City</i>	332 Temple st.
Harry Cannon Hurd	<i>Cleveland, O.</i>	252 York st.
Francis deLacey Hyde	<i>Plainfield, N. J.</i>	219 D.
Leland Ingersoll	<i>Cleveland, O.</i>	46 Elm st.
Charles Samuel Ingham	<i>Saybrook</i>	186 C.
Edward Swift Isham, Jr.	<i>Chicago, Ill.</i>	126 High st.
Stuart Dodge Jessup	<i>Beyrout, Syria</i>	125 N.
Sherman Skinner Jewett	<i>Buffalo, N. Y.</i>	82 Wall st.
Frederick Morgan Johnson	<i>Norwich</i>	270 L.
Vertner Kenerson	<i>East Cambridge, Mass.</i>	1 TR.
Edward Learned Kernochan	<i>Pittsfield, Mass.</i>	42 Elm st.
Frederick Strong Kimball	<i>Hartford</i>	254 L.
Howard Thayer Kingsbury	<i>New York City</i>	203 York st.
Lewis Taylor Knox	<i>New Castle, Pa.</i>	137 College st.
George Shoemaker LaBar	<i>New Haven</i>	236 Crown st.
Howard LaField	<i>Bridgeport</i>	100 William st.
Joseph Langdon	<i>Plymouth</i>	38 High st.
Albert Lee	<i>New York City</i>	154 Grove st.
William Josiah Leverett	<i>Binghamton, N. Y.</i>	125 N.
Theodore Nelson Lillagore	<i>Philadelphia, Pa.</i>	203 York st.
Joseph Potts Lloyd, Jr.	<i>East Orange, N. J.</i>	193 C.
Harry Long	<i>Wilkes-Barre, Pa.</i>	64 High st.
Edward Nathaniel Loomis	<i>Brooklyn, N. Y.</i>	78 Whalley av.
John Frederic McBean	<i>Chicago, Ill.</i>	629 Chapel st.
Norman McClintock	<i>Pittsburgh, Pa.</i>	223 York st.
Walter McClintock	<i>Pittsburgh, Pa.</i>	223 York st.
Malcolm MacLear	<i>Wilmington, Del.</i>	120 York st.
Edward Augustus Manice	<i>New York City</i>	9 Library st.
Charles Capron Marsh	<i>Rahway, N. J.</i>	133 College st.
Abraham Loeb May	<i>New Haven</i>	121 Washington st.
Lafayette Benedict Mendel	<i>Delhi, N. Y.</i>	423 Temple st.
Herbert Lee Mills	<i>Middlefield</i>	177 F.
William Revell Moody	<i>Northfield, Mass.</i>	132 F.
Samuel Wylie Black Moorhead	<i>Pittsburgh, Pa.</i>	217 York st.
Sherman Morse	<i>Canandaigua, N. Y.</i>	253 L.
Wallace Simon Moyle	<i>Sharon, Mass.</i>	79 N. M.
Winthrop Sargent Gilman Noyes	<i>St. Paul, Minn.</i>	254 York st.
Frank Richard Oastler	<i>New York City</i>	233 York st.
Harry Leroy Pangborn	<i>Jersey City, N. J.</i>	112 N.
Amasa Junius Parker, 3d	<i>Albany, N. Y.</i>	242 York st.

Willis Nathaniel Parker	<i>Niantic</i>	226 Crown st.
Clifford Ives Parshley	<i>Middletown</i>	95 N. M.
Charles Orrin Penfield	<i>Delhi, N. Y.</i>	35 High st.
William Andrew Perrin	<i>Titusville, Pa.</i>	30 s.
Samuel Fowler Phelps	<i>White Hall, Ky.</i>	38 High st.
John Franklin Plummer, Jr.	<i>New York City</i>	230 D.
Robert Watson Pomeroy	<i>Auburn, N. Y.</i>	229 D.
William Frederick Poole, Jr.	<i>Evanston, Ill.</i>	29 s.
Henry Riggs Rathbone	<i>Albany, N. Y.</i>	242 York st.
Albert Merriman Reed	<i>Manchester, Vt.</i>	111 N.
Adelbert Lee Reynolds	<i>Waterloo, N. Y.</i>	107 York st.
William Castle Rhodes	<i>Cleveland, O.</i>	271 L.
George Phelps Robbins	<i>New York City</i>	260 L.
Frederick Harvey Robinson	<i>Corning, N. Y.</i>	93 N. M.
William Goodsell Rockefeller	<i>New York City</i>	230 D.
Marshall Jewell Root	<i>Detroit, Mich.</i>	109 Wall st.
William Drown Rorer	<i>Philadelphia, Pa.</i>	342 Howard av.
Arthur Benedict Russell	<i>South Norwalk</i>	409 Temple st.
Erastus Dean Ryder	<i>Plainfield, N. J.</i>	116 College st.
Francis Williams Sacket	<i>Cape Vincent, N. Y.</i>	177 F.
William Henry St. John	<i>Hartford</i>	168 York st.
John Barry Sears	<i>Chicago, Ill.</i>	70 Grove st.
Samuel Carter Shaw	<i>Redding Ridge</i>	96 N. M.
Henry King Sheldon, Jr.	<i>Brooklyn, N. Y.</i>	405 Temple st.
Edward Francis Simms	<i>Paris, Ky.</i>	82 Wall st.
William Erskine Simms, Jr.	<i>Paris, Ky.</i>	82 Wall st.
Hubbard Taylor Simpson	<i>Winchester, Ky.</i>	107 Wall st.
Francis Louis Slade	<i>New York City</i>	162 F.
Clement Grubb Smith	<i>Joanna Furnace, Pa.</i>	84 Wall st.
George Ferguson Smith	<i>Andover, Mass.</i>	1081 Chapel st.
Herbert Knox Smith	<i>Farmington</i>	136 College st.
Ray Burdick Smith	<i>Lincklaen, N. Y.</i>	1010 Chapel st.
William Griswold Smith	<i>Toledo, O.</i>	94 N. M.
George Howard Street	<i>Exeter, N. H.</i>	96 N. M.
Egerton Swartwout	<i>Stamford</i>	166 York st.
George Sherman Talcott	<i>New Britain</i>	20 s.
Daniel Gleason Tenney	<i>New York City</i>	237 Orange st.
George Davis Terry	<i>Brooklyn, N. Y.</i>	212 D.
William Nevin Thatcher	<i>Pueblo, Col.</i>	17 College st.
Samuel Clifton Thompson	<i>Pottsville, Pa.</i>	32 s.
Edward Allen Thurber	<i>Syracuse, N. Y.</i>	268 L.
Alliene Wetmore Treadwell	<i>New Castle, Pa.</i>	109 N.
Luther Henry Tucker, Jr.	<i>Albany, N. Y.</i>	285 York st.
Harry Hallam Tweedy	<i>Binghamton, N. Y.</i>	32 s.
Clifford Gray Twombly	<i>Charlestown, Mass.</i>	158 F.

SHEFFIELD SCIENTIFIC SCHOOL

GRADUATE STUDENTS

Louis Lawrence Barnum, LL.B. } Yale University, 1886	<i>Thompsonville</i>	16 S. H.
John Bartholomew, PH.B. } Yale University, 1883	<i>Hudson, N. Y.</i>	A.
Malcom Booth, PH.B. } Yale University, 1879	<i>New Haven</i>	175 Oak st.
William Williams Crehore, B.A. } Yale University, 1886	<i>Cleveland, O.</i>	44 S. M.
Orville Henry Drake, M.A. } Bates College, 1884	<i>Ashland, N. H.</i>	242 York st.
Oliver Cummings Farrington, B.S. } Maine Agric. College	<i>Portland, Me.</i>	55 Prospect st.
George Francis Garneau, B.A. } St. Louis University, 1886	<i>St. Louis, Mo.</i>	132 Wall st.
Walter Greenwood Graves, B.A. } Yale University, 1886	<i>New Haven</i>	101 Grove st.
Horace Sedgwick Hart, B.A. } Yale University, 1887	<i>New Haven</i>	104 William st.
Edmund Otis Hovey, B.A. } Yale University, 1884	<i>Bridgeport</i>	90 N. M.
Elliot Cowdin Lambert, B.A. } Yale University, 1886	<i>New York City</i>	143 York st.
Louis Valentine Pirsson, PH.B. } Yale University, 1882	<i>New York City</i>	14 S. H.
Samuel Bostwick Robbins, PH.B. } Yale University, 1886	<i>Lakeville</i>	70 Howe st.
John Rogers, Jr., B.A. } Yale University, 1887	<i>New York City</i>	60 W.
James Alward Seymour, PH.B. } Yale University, 1883	<i>Auburn, N. Y.</i>	A.
Philemon Tecumseh Sherman, B.A. } St. Louis University, 1886	<i>St. Louis, Mo.</i>	59 Grove st.
Erwin Starr Sperry, PH.B. } Yale University, 1887	<i>Ansonia</i>	Ansonia
Calvert Townley, PH.B. } Yale University, 1886	<i>Cincinnati, O.</i>	A.
Henry Stephens Washington, B.A. } Yale University, 1886	<i>New Haven</i>	174 Orange st.
George Stanley Woodward, B.A. } Yale University, 1887	<i>Wilkes-Barre, Pa.</i>	136 F.

GRADUATE STUDENTS, 20

SENIOR CLASS

Arthur Chambers Alexander	<i>Honolulu, H. I.</i>	85 w.
John Childe Anderson	<i>Sing Sing, N. Y.</i>	132 Wall st.
Joseph Albright Archbald	<i>Scranton, Pa.</i>	36 Elm st.
Gardner Ball, Jr.	<i>San Francisco, Cal.</i>	36 Elm st.
William Hill Bean	<i>New Haven</i>	40 Pleasant st.
Charles Bart Berger	<i>Denver, Col.</i>	88 Wall st.
George Bart Berger	<i>Denver, Col.</i>	88 Wall st.
Marshall Latham Bond	<i>New York City</i>	43 College st.
William Tillinghast Bull	<i>Newport, R. I.</i>	35 High st.
George Robert Carter	<i>Honolulu, H. I.</i>	43 College st.
William Clarke Catlin	<i>Providence, R. I.</i>	86 w.
George David Colton	<i>Collinsville</i>	8 Prospect pl.
Charles Edward Curtis	<i>New Haven</i>	138 Dwight st.
Richard Sydney Curtiss	<i>Stratford</i>	Stratford
Jesse Chase Dann	<i>Buffalo, N. Y.</i>	36 Elm st.
Henry Lewis Davis	<i>Wallingford</i>	1010 Chapel st.
George Howard Davison	<i>New York City</i>	43 College st.
William Henry Davol, Jr.	<i>Brooklyn, N. Y.</i>	103 Wall st.
Carlton Melville DeWolf	<i>New York City</i>	1142 Chapel st.
Robert Russel Dickey	<i>Dayton, O.</i>	88 Wall st.
John Eufemio Dockendorff	<i>Brooklyn, N. Y.</i>	88 Wall st.
John Feeter Easterbrook	<i>New Haven</i>	82 York sq.
Henry Hays Ellis	<i>Oxford, Me.</i>	200 Grove st.
Frank Harold Farquhar	<i>York, Pa.</i>	88 Wall st.
John Ellis Field	<i>Denver, Col.</i>	59 Grove st.
Richard Huntington Franchot	<i>Schenectady, N. Y.</i>	43 College st.
Deane Funk	<i>McLean, Ill.</i>	72 w.
Henry Kellogg Goetchius	<i>New York City</i>	43 College st.
James Douglas Gold	<i>West Cornwall</i>	59 Grove st.
Addison Graves	<i>New London</i>	85 w.
Franklin Moses Gray	<i>Chicago, Ill.</i>	1142 Chapel st.
Howard Greer, Jr.	<i>Chicago, Ill.</i>	161 York st.
Matthew Griswold, Jr.	<i>Erie, Pa.</i>	65 w.
Fred R. Hamlin	<i>Chicago, Ill.</i>	1179 Chapel st.
Charles Merritt Hemingway	<i>Watertown</i>	1142 Chapel st.
Noble Foster Hoggson	<i>New Haven</i>	126 York st.
Howard Livingstone Isbell	<i>Union City</i>	8 Prospect pl.
Harry Garrybrant Jenner	<i>Dayton, O.</i>	125 Dwight st.
Cyrus Field Judson	<i>New York City</i>	43 College st.
George Converse Kimball	<i>Hartford</i>	86 w.
Felix Kleeberg	<i>New Haven</i>	14 Orange st.
Edward Lambert Leeds	<i>Stamford</i>	130 Wall st.

Thomas Albert Legler, Jr.	<i>Dayton, O.</i>	1142 Chapel st.
Louis LeSassier	<i>New Orleans, La.</i>	72 w.
Edwin Hoyt Lockwood	<i>New Canaan</i>	200 Grove st.
Samuel Harkness McCrea, Jr.	<i>Chicago, Ill.</i>	36 Elm st.
George Grant Mason	<i>Milburn, Ill.</i>	132 Wall st.
William Smith Mason	<i>Milburn, Ill.</i>	132 Wall st.
Charles Griffin Miller	<i>New Rochelle, N. Y.</i>	36 Elm st.
Edward Steward Moore	<i>New London</i>	409 Temple st.
James Augustus Nelson	<i>Bridgeport</i>	1010 Chapel st.
Charles Norris, Jr.	<i>New York City</i>	126 Wall st.
Elbert Ellsworth Norton	<i>New Haven</i>	409 Temple st.
Selden Yale Osborn	<i>New Haven</i>	232 York st.
Franklin T. Parlin	<i>Cassellon, Dakota</i>	62 w.
John Erskine Patrick	<i>Omaha, Nebr.</i>	64 High st.
Daniel Tucker Coffin Perkins	<i>San Francisco, Cal.</i>	36 Elm st.
Francis Cole Pratt	<i>Hartford</i>	36 Elm st.
John Goodell Prouty	<i>Spencer, Mass.</i>	36 Elm st.
George Brinckerhoff Richards	<i>New Haven</i>	313 York st.
Edwin Wright Robinson	<i>New Haven</i>	255 Ferry st.
Henry Charles Schwab	<i>Chicago, Ill.</i>	66 w.
Charles Kirtland Shelton	<i>Bridgeport</i>	103 Wall st.
Shiukichi Shigemi	<i>Inabari, Japan</i>	8 Prospect pl.
Ernest Ellsworth Smith	<i>New Haven</i>	16 Hughes pl.
Percey Franklyn Smith	<i>New Haven</i>	13 Home pl.
Ralph Hebert Smith	<i>Waterbury</i>	389 Temple st.
Frederick William Spanutius	<i>New Haven</i>	180 Chestnut st.
Charles Weaver Stewart	<i>Newport, R. I.</i>	35 High st.
Howard Canning Taylor	<i>Green's Farms</i>	57 Grove st.
William Conquest Tucker	<i>New York City</i>	61 w.
Charles Alling Tuttle	<i>New Haven</i>	364 Orchard st.
Morgan Walcott	<i>New York City</i>	389 Temple st.
Ralph McIntosh Wilcox	<i>Portland</i>	217 York st.
Frank Clark Woodruff	<i>Orange</i>	31 1/2 Broadway
		SENIORS, 75

JUNIOR CLASS

William Belknap Allen	<i>Pewee Valley, Ky.</i>	133 College st.
James Bradshaw Bailey	<i>Harrisburg, Pa.</i>	43 College st.
Erdmann Dwight Baldwin	<i>Honolulu, H. I.</i>	419 Temple st.
William Bartlett Beckley	<i>New Haven</i>	300 Howard av.
Mark Spaulding Bradley	<i>East Jaffrey, N. H.</i>	57 w.
William Dennison Breed	<i>Cincinnati, O.</i>	68 w.
William Fances Breeze	<i>San Francisco, Cal.</i>	46 Elm st.
Elton Goodrich Burroughs	<i>New York City</i>	127 Howe st.
George Tyler Burroughs, Jr.	<i>Chicago, Ill.</i>	391 Temple st.
Henry Studley Burroughs	<i>Chicago, Ill.</i>	391 Temple st.
Frank Arthur Busse	<i>New Haven</i>	3 Ridge st.
Perry Moore Caldwell	<i>Wheeling, W. Va.</i>	124 w.
Arthur Sanford Cheney	<i>New Haven</i>	45 Elm st.
Tecumseh Sherman Clark	<i>Pittsburgh, Pa.</i>	19 Kenwick House
William Shiner Clawson	<i>Woodstown, N. J.</i>	36 Elm st.
William Hillard Conyngham	<i>Wilkes-Barre, Pa.</i>	130 Wall st.
Frank Marcus Cooper	<i>Kingston, Pa.</i>	116 w.
Louis Julius Curtis	<i>Stamford</i>	389 Temple st.
Arthur Herbert Day	<i>New Haven</i>	310 York st.
Edward Hangary Day	<i>New Albany, Ind.</i>	389 Temple st.
Philip James Deering	<i>Portland, Me.</i>	266 York st.
Edwin Kirk Dillingham	<i>New Orleans, La.</i>	133 College st.
Louis Coert DuBois	<i>Hudson, N. Y.</i>	124 w.
Frederick Howard Ellsworth	<i>Hartford</i>	1 Whalley av.
Harootum Enfiajian	<i>Harpoon, Turkey</i>	92 York sq.
Edward Everest	<i>Newark, N. J.</i>	90 Wall st.
William Irving Ferrey	<i>Pittsfield, Mass.</i>	57 w.
Theron Rockwell Field	<i>New York City</i>	88 Wall st.
Lewis Brown Gawtry	<i>New York City</i>	43 College st.
Harry Cromwell Gibbons	<i>Middletown</i>	133 College st.
George Frank Goodale	<i>New Haven</i>	6 Prospect pl.
George Dexter Gregory	<i>Brooklyn, N. Y.</i>	237 Orange st.
Louis Montrose Haight	<i>Alameda, Cal.</i>	90 Wall st.
Henry Pierce Hall	<i>San Francisco, Cal.</i>	36 Elm st.
John Augustus Hartwell	<i>Unionville, N. Y.</i>	128 Temple st.
Leland Howard	<i>Hartford</i>	43 College st.
Arthur Grant Huntington	<i>Cleveland, O.</i>	132 Wall st.
Arthur Wiswell Jepson	<i>New Haven</i>	30 Grove st.
John Henry Klock, Jr.	<i>New Haven</i>	1201 Chapel st.
Edwin Forest Landy	<i>Cincinnati, O.</i>	101 w.
C. Carlton Lee	<i>Cleveland, O.</i>	132 Wall st.
Eugene Lentilhon	<i>New York City</i>	71 w.

George Alfred Lund	<i>West Stratford</i>	289 York st.
David Lyman	<i>Middlefield</i>	106 Wall st.
Boynton Wells McFarland	<i>New Haven</i>	67 Mansfield st.
Frank Aloysius Maloney	<i>New Haven</i>	34 Ferry st.
Kingsley Walton Martin	<i>Staten Island, N. Y.</i>	132 Wall st.
Ferris Jacobs Meigs	<i>New York City</i>	88 Wall st.
George Wellington Miles, Jr.	<i>Milford</i>	Milford
John Raymond Mitchell	<i>Franklin, Pa.</i>	120 High st.
Augustus René Moën	<i>New York City</i>	43 College st.
Edwin Morrison	<i>Cincinnati, O.</i>	132 Wall st.
William Brewster Morrison	<i>Willimantic</i>	128 Temple st.
William Belknap Newberry	<i>New Haven</i>	73 Whitney av.
Roger Samuel Newell	<i>Bristol</i>	88 Wall st.
Edwin Oppenheimer	<i>New Haven</i>	78 Lyon st.
Frank Lee Owen	<i>Oakland, Cal.</i>	46 Elm st.
Gains Foster Paddock	<i>St. Louis, Mo.</i>	36 Elm st.
Kenyon Vickers Painter	<i>Cleveland, O.</i>	155 Elm st.
Frank Wyman Parmerter	<i>Plattsburgh, N. Y.</i>	27 Wall st.
William Henry Pierce	<i>South Britain</i>	22 Whalley av.
Edwin Read	<i>Brooklyn, N. Y.</i>	36 Elm st.
Irwin Rew	<i>Chicago, Ill.</i>	90 Wall st.
Henry Work Rianhard	<i>New York City</i>	43 College st.
Paul Skiff Robinson	<i>New Haven</i>	137 Edwards st.
Alfred Schwab	<i>Chicago, Ill.</i>	66 w.
Paul Sheafer	<i>Pottsville, Pa.</i>	105 Wall st.
Frederick Robinson Shepard	<i>Minneapolis, Minn.</i>	43 College st.
Arthur Bertram Skelding	<i>Riverside</i>	393 Temple st.
George Jarvis Spencer	<i>Old Saybrook</i>	411 Temple st.
Charles Emerson Stone	<i>Spencer, Mass.</i>	128 High st.
Danford Newton Barney Sturgis	<i>New York City</i>	71 w.
Lewis Hobart Sweetser	<i>San Francisco, Cal.</i>	389 Temple st.
Henry Hutchins Sykes	<i>New Haven</i>	114 High st.
Orien Edward Taft	<i>Chicago, Ill.</i>	36 Elm st.
Abraham Louis Thalheimer	<i>New Haven</i>	100 St. John st.
Charles Newman Traver	<i>Hudson, N. Y.</i>	393 Temple st.
Clarence Beecher Twitchell	<i>New Haven</i>	68 Asylum st.
Harry Mighels Verrill	<i>Portland, Me.</i>	90 Wall st.
Robert Taylor Wheeler	<i>Jersey City, N. J.</i>	88 Wall st.
Guthrie Minor Wilson	<i>Bardstow, Ky.</i>	389 Temple st.
John Albert Woodruff	<i>Windsor Locks</i>	55 Prospect st.
Julian Vallette Wright	<i>Cincinnati, O.</i>	68 w.
William Charles Wurtenberg	<i>Willink, N. Y.</i>	88 Wall st.

FRESHMAN CLASS

Philip Allen	<i>Providence, R. I.</i>	133 College st.
John Alling, Jr.	<i>Chicago, Ill.</i>	128 High st.
Philip Danforth Armour, Jr.	<i>Chicago, Ill.</i>	44 Elm st.
Cyrus Morgan Arnold	<i>New York City</i>	58 w.
George Perkins Bissell, Jr.	<i>Wilmington, Del.</i>	150 College st.
Theodore Whitney Blake	<i>Whitneyville</i>	29 Wall st.
George Henry Blakeslee	<i>Schenectady, N. Y.</i>	65 Grove st.
Wendell Phillips Brown	<i>Canterbury</i>	81 Wall st.
Horace Ray Burritt	<i>New Haven</i>	54 Edwards st.
William Harper Butler	<i>Olean, N. Y.</i>	3 Trumbull st.
Edward Newton Camp	<i>Chicago, Ill.</i>	395 Temple st.
Frederic Carter	<i>Waterbury</i>	58 w.
Robert Lockwood Casement	<i>Painesville, O.</i>	1150 Chapel st.
Horace Bushnell Cheney	<i>South Manchester</i>	133 College st.
John Platt Cheney	<i>South Manchester</i>	206 Crown st.
Ralph Roger Clapp	<i>Pawtucket, R. I.</i>	35 High st.
Duane Phillips Cobb	<i>Kankakee, Ill.</i>	36 Wall st.
Clarence Beverly Davison	<i>New York City</i>	130 Wall st.
Harry Goodyear Day	<i>Seymour</i>	114 High st.
Nelson Lloyd Deming	<i>Danbury</i>	16 Elm st.
Walter Dodge	<i>Stamford</i>	138 College st.
Robert Metcalf Dodsworth	<i>Los Angeles, Cal.</i>	31 Trumbull st.
Harrison Irwin Drummond	<i>St. Louis, Mo.</i>	425 Temple st.
Julian DuBois	<i>Hudson, N. Y.</i>	150 College st.
Harry Jay English	<i>Chicago, Ill.</i>	395 Temple st.
Alexander William Evans	<i>New Haven</i>	12 High st.
Willis Judson Fenn	<i>Plymouth</i>	395 Temple st.
Freeland Barney Gardner	<i>Chicago, Ill.</i>	38 Elm st.
Ralph Schuyler Goodwin, Jr.	<i>Thomaston</i>	395 Temple st.
Neil Gray, Jr.	<i>Oswego, N. Y.</i>	1150 Chapel st.
George Nelson Griffin	<i>Sing Sing, N. Y.</i>	391 Temple st.
William Wickware Griffin	<i>Detroit, Mich.</i>	266 York st.
Everett Gallup Griggs	<i>St. Paul, Minn.</i>	1142 Chapel st.
Lewis Winters Gunckel	<i>Dayton, O.</i>	297 York st.
Charles Newton Gunn	<i>New Haven</i>	255 York st.
Joseph Barnard Hall	<i>Hartford</i>	293 York st.
George Isaac Hemingway	<i>Westville</i>	Westville
William Robert Henderson	<i>Randolph, N. Y.</i>	101 w.
Lawrence Heyworth	<i>Chicago, Ill.</i>	1079 Chapel st.
Harry Dutton Holbrook	<i>Utica, N. Y.</i>	158 York st.
Frank Holden	<i>Bridgeport</i>	1010 Chapel st.
Theodore Dudley Irwin	<i>Albany, N. Y.</i>	90 Wall st.

Adrian Muller Isham	<i>New York City</i>	130 Wall st.
Walter Tracy Ives	<i>Montreal, Canada</i>	391 Temple st.
Duncan Starr Johnson	<i>Cromwell</i>	10 Orange st.
Nathaniel Sherburne Kaime	<i>St. Louis, Mo.</i>	237 Orange st.
Henry Hawley Keeler	<i>Ridgefield</i>	149 Bradley st.
Elbridge Byron Keith	<i>Chicago, Ill.</i>	70 Grove st.
William Matthew Kenna	<i>New Haven</i>	Selden House
Charles Louis Kirschner	<i>New Haven</i>	94 Prospect st.
Harvey Merrill Lawson	<i>Union</i>	200 York st.
Franklin Lyman Lawton	<i>Meriden</i>	Meriden
Oliver Smith Lyford, Jr.	<i>Chicago, Ill.</i>	1136 Chapel st.
Herbert McBride	<i>Cleveland, O.</i>	1150 Chapel st.
Frank Dunlevy McCaulley	<i>New York City</i>	928 Chapel st.
John Carter Machale	<i>Sawyer City, Pa.</i>	297 York st.
Henry Porter McKnight	<i>Louisville, Ky.</i>	391 Temple st.
Campbell Emory McMichael	<i>Philadelphia, Pa.</i>	154 Grove st.
Archibald McNeil	<i>New Haven</i>	149 Bradley st.
Frederick James Mann	<i>Utica, N. Y.</i>	25 High st.
William Crosby Marshall	<i>Cromwell</i>	65 Grove st.
Samuel Richard Maynard	<i>Utica, N. Y.</i>	126 Wall st.
Harral Mulliken	<i>Washington, D. C.</i>	42 Elm st.
James Moorhead Murdoch	<i>Pittsburgh, Pa.</i>	1090 Chapel st.
John Stevens Murdock	<i>Westbrook</i>	1575 Chapel st.
Paul Nash	<i>Westport</i>	409 Temple st.
Philip Schaff Noble	<i>Chicago, Ill.</i>	395 Temple st.
Edgar Burr Northrup	<i>Broadalbin, N. Y.</i>	44 Elm st.
Alfred Walling Ogden	<i>Keyport, N. J.</i>	286 Norton st.
Charles Augustus Otis, Jr.	<i>Cleveland, O.</i>	120 High st.
Joseph Edward Otis, Jr.	<i>Chicago, Ill.</i>	130 Wall st.
Robert Ellsworth Peck	<i>New Haven</i>	486 Elm st.
John Frederick Pennell	<i>New Haven</i>	109 High st.
Henry Adams Plumer	<i>Germantown, Pa.</i>	Kenwick House
William Strong Post	<i>Hartford</i>	1010 Chapel st.
John Conover Powell	<i>Dayton, O.</i>	297 York st.
Philip Durkee Rice	<i>St. Paul, Minn.</i>	44 Elm st.
Frank Russell Rich	<i>New Haven</i>	369 Shelton av.
Charles Talbot Richmond	<i>Providence, R. I.</i>	237 Orange st.
Walter Brooks Robinson	<i>Chicago, Ill.</i>	99 Wall st.
William Sterling Roby	<i>Rochester, N. Y.</i>	1150 Chapel st.
Charles Francis Rogers	<i>New Canaan</i>	60 W.
Edwin Rowe, Jr.	<i>New Haven</i>	104 Park st.
James Woodrow Ruthven	<i>Scranton, Pa.</i>	266 York st.
Charles Francis Sawyer	<i>Dover, N. H.</i>	1010 Chapel st.
Ernest Elisha Severy	<i>Waterbury</i>	200 York av.
Chester Burdell Shepard	<i>Middletown</i>	10 Orange st.

Chauncey Davis Short	<i>New York City</i>	130 Wall st.
William Alexander Simms	<i>Dayton, O.</i>	393 Temple st.
John Theodore Snitzler	<i>Chicago, Ill.</i>	297 York st.
Albert Kingsley Spencer	<i>Cleveland, O.</i>	43 College st.
Walter Tuttle Spencer	<i>Guilford</i>	27 College st.
Charles Bailey Spruce	<i>Waterbury</i>	391 Temple st.
Frederic Clark Strong	<i>Winsted</i>	242 York st.
Harry Roy Sweny	<i>Albany, N. Y.</i>	149 College st.
John Clayton Tracy	<i>Fair Haven</i>	299 Center st., F. H.
Albert Milford Turner	<i>Northfield</i>	161 Orange st.
Charles VanRensselaer	<i>Stottville, N. Y.</i>	126 Wall st.
John McKee Verhoeff	<i>Louisville, Ky.</i>	53 Prospect st.
William Ernest Walker	<i>Chicago, Ill.</i>	1079 Chapel st.
Samuel Edwin Wardell	<i>New Haven</i>	39 Lynwood st.
Edward Young Ware	<i>St. Louis, Mo.</i>	421 Temple st.
William Walker Weare	<i>Chicago, Ill.</i>	393 Temple st.
Henry Lord Wheeler	<i>Chicago, Ill.</i>	295 York st.
Frederick Wareham Williams	<i>Norwich</i>	44 Elm st.
George Cushing Worthington	<i>Cleveland, O.</i>	133 College st.

FRESHMEN, 106

SPECIAL STUDENTS NOT CANDIDATES FOR A DEGREE

Joseph Stanley Brown	<i>Washington, D. C.</i>	14 S. H.
John Stockly Cary	<i>Cleveland, O.</i>	28 Kenwick House
James Henry Coleman	<i>New York City</i>	63 W.
John Nesbitt Conyngham	<i>Wilkes-Barre, Pa.</i>	130 Wall st.
Louis Stanley Ferry	<i>New Haven</i>	261 Crown st.
John Kenneth Mackenzie	<i>London, England</i>	28 Kenwick House

SPECIAL STUDENTS, 6

SUMMARY

GRADUATES	.	.	.	.	.	20
SENIORS	.	.	.	.	.	75
JUNIORS	.	.	.	.	.	84
FRESHMEN	.	.	.	.	.	106
SPECIAL	.	.	.	.	.	6

291

SCHOOL OF THE FINE ARTS

Georgie G. Allis	<i>Birmingham</i>
M. Ona. Banks	<i>New Haven</i>
Nettie E. Barnum	<i>New Haven</i>
Constance H. Blake	<i>New Haven</i>
Margaret W. Buck	<i>Poughkeepsie, N. Y.</i>
Ida G. Buell	<i>Clinton</i>
Susan J. Candee	<i>New Haven</i>
Mary F. Carew	<i>New Haven</i>
Laurance J. Carmalt	<i>New Haven</i>
Genevieve A. Cowles	<i>Farmington</i>
Maud A. Cowles	<i>Farmington</i>
Grace Daggett	<i>New Haven</i>
Ozias B. Dodge	<i>Groton, Mass.</i>
Harriet C. Downs	<i>Birmingham</i>
Clara R. Durgy	<i>New Haven</i>
Elizabeth T. Fitch	<i>New Haven</i>
Rosa Fleetwood	<i>New Haven</i>
Irving E. Hurlbut	<i>New Haven</i>
Harriet R. Kirby	<i>New Haven</i>
Josephine M. Lewis	<i>New Haven</i>
Mary E. Lyman	<i>Middlefield</i>
Minnie L. Miles	<i>Milford</i>
Georgianna A. Mosher	<i>New Haven</i>
Eleanor Munger	<i>New Haven</i>
Elizabeth S. Newberry	<i>New Haven</i>
Etta A. Osborne	<i>Wallingford</i>
Laura F. Philbrook	<i>Middletown</i>
Mary Pickett	<i>Whitneyville</i>
Elizabeth S. Pitman	<i>New Haven</i>
Stella M. Poronto	<i>Fair Haven</i>
Martha J. Potter	<i>New Haven</i>
Bela L. Pratt	<i>Salem</i>
Laura G. Preston	<i>New Haven</i>
Annie C. Punderford	<i>New Haven</i>
Harriet R. Richards	<i>New Haven</i>
Ida Rogowski	<i>New Haven</i>
Elsie Rowland	<i>Waterbury</i>
Cora L. Schickle	<i>Poughkeepsie, N. Y.</i>

Sylvia Shares	<i>New Haven</i>
Jessie B. Sherman	<i>Whitneyville</i>
Katherine L. Spencer	<i>Woodmont</i>
Mary E. Sperry	<i>New Haven</i>
Laura Stoughton	<i>New Haven</i>
Marietta I. Stow	<i>South Norwalk</i>
Danford N. Sturgis	<i>New York City</i>
Clara L. Thayer	<i>W. Medway, Mass.</i>
Albert G. Thompson	<i>Fair Haven</i>
Mary Thompson	<i>Poughkeepsie, N. Y.</i>
Stephen S. Thorn	<i>New York City</i>
C. Louise Weir	<i>New Haven</i>
Susan S. White	<i>New Haven</i>
Lucy M. Whitmore	<i>New Haven</i>
Annie H. Williston	<i>New Haven</i>
Fannie L. Wiseman	<i>New Haven</i>
Jennie J. Wooding	<i>Stratford</i>

Art Students,	55
Special Students,	3
Undergraduate Students, in Drawing,	105
<hr/>	
Total number of students receiving instruction in the Art School,	163

DEPARTMENT OF THEOLOGY

(YALE DIVINITY SCHOOL)

RESIDENT LICENTIATE

ATTENDING LECTURES

Evan Hartzel Martin, B.A. } Williams College, 1872	<i>Danville, N. Y.</i>	21 Veto st.
---	------------------------	-------------

GRADUATE CLASS,

PURSUING FOURTH YEAR STUDIES

James Wilson Bixler, B.D. } Yale University, 1887, M.A. Amherst College, 1885 (<i>On the Hooker Fellowship</i>)	<i>Hanover, Pa.</i>	110 W.
Henry Eldridge Bourne, B.D. } Yale University, 1887, B.A. Yale University, 1883 (<i>On the Hooker Fellowship</i>)	<i>Sharon</i>	36 E.
Mark Wilson Chunn, B.D. } Yale University, 1886, B.A. Western Md. College, 1882	<i>Mechanicsville, Md.</i>	34 E.
John Lester Franklin, B.D. } Yale University, 1882, B.A. Yale University, 1879	<i>New Haven</i>	6 E.
John Kenyon Kilbourn, } Auburn Theol. Seminary, M.A. Hamilton College, 1877	<i>Pittsford, N. Y.</i>	23 E.
Clinton Lockhart, } College of the Bible, B.A. Kentucky University, 1886	<i>Millersburg, Ky.</i>	159 York st.
Rikizo Nakashima, B.D. } Yale University, 1887, B.A. Western Reserve University, 1884	<i>Kiyoto, Japan</i>	104 W.
Edward Smith Parsons, B.D. } Yale University, 1887, M.A. Amherst College, 1886	<i>Brooklyn, N. Y.</i>	108 W.
Arthur Gooding Pettengill, B.D. } Yale University, 1885, B.A. Bowdoin College, 1881	<i>Brewer, Me.</i>	73 W.
Milton Sargent Phillips, B.D. } Yale University, 1883, M.A. Drury College, 1883	<i>New Haven</i>	119 Middletown av.
John Pierpont, B.D. } Yale University, 1886, B.A. Yale University, 1883	<i>New Haven</i>	108 Argyle st.

Frank Chamberlin Porter, B.D. } Yale University, 1886, M.A. Beloit College, 1883	<i>Beloit, Wisc.</i>	99 W.
Richard LaRue Swain } Union Biblical Seminary, B.A. Western College, 1885	<i>Promise City, Iowa</i>	169 Elliott st.
Ervin Llewellyn Thorpe, M.L. } Yale University, 1887, M.A. Syracuse University, 1882	<i>West Haven</i>	2d av.

GRADUATE CLASS, 14

SENIOR CLASS

Lewin Frank Buell, B.A. } Yale University, 1885	<i>Madison</i>	29 E.
Empson Cory, B.A. } Wabash College, 1885	<i>Crawfordsville, Ind.</i>	97 W.
William Watts Davidson, B.A. } Yadkin College, 1880	<i>Gibsonville, N. C.</i>	95 W.
Henry Davies, } Cheshunt College	<i>London, England</i>	90 W.
Charles Allen Dinsmore, } Kentucky University	<i>Stowe, Vt.</i>	27 E.
Franklin LaDu Ferguson, } Victoria University	<i>Chicago, Ill.</i>	117 W.
Frederick Davis Greene, B.A. } Amherst College, 1885	<i>Constantinople, Turkey</i>	54 E.
John Edward Herman, } Union Biblical Institute	<i>Warsaw, N. Y.</i>	19 E.
D. Melancthon James, B.A. } Randolph Macon College, 1881	<i>Baltimore, Md.</i>	93 W.
Lewis Franklin John, B.A. } Otterbein University, 1883	<i>Dayton, O.</i>	21 E.
Gerald Stanley Lee, B.A. } Middlebury College, 1885	<i>Brattleboro', Vt.</i>	79 W.
Frank Fales Lewis, B.A. } Beloit College, 1884	<i>Stillman Valley, Ill.</i>	25 E.
Charles Loomis, B.A. } Amherst College, 1882	<i>Charlestown, O.</i>	103 W.
Frank Ranney Luckey, B.S. } Cornell University, 1882	<i>Poughkeepsie, N. Y.</i>	21 Eld st.
Robert Luvern Marsh, B.A. } Nebraska University, 1884	<i>Lincoln, Nebr.</i>	126 Liberty st.
Philip Hannibal Mason, B.A. } Carleton College, 1883	<i>Vermillion, Ill.</i>	17 E.
Alexander Milne	<i>Westerly, R. I.</i>	42 E.
Henry Harvey Morse, B.A. } Amherst College, 1885	<i>Plantsville</i>	32 E.

Lyman Plimpton Peet, B.A. }	<i>West Haven</i>	15 E.
Yale University, 1885 }		
James Bronson Reynolds, B.A. }	<i>North Haven</i>	83 w.
Yale University, 1884 }		
Charles Nichols Severance, }	<i>Mexico, N. Y.</i>	1306 State st.
Hamilton College }		
Frank Varnum Stevens, B.A. }	<i>Vermontville, Mich.</i>	87 w.
Carleton College, 1884 }		
Lucius Harrison Thayer, B.A. }	<i>Westfield, Mass.</i>	111 w.
Amherst College, 1882 }		
John Oliver Thrush, B.A. }	<i>Ridgeville, W. Va.</i>	88 w.
Lebanon Valley College, 1884 }		
Frank VanAllen, B.A. }	<i>Chicago, Ill.</i>	15 E.
Yale University, 1885 }		
Clarence Augustus Vincent, B.A. }	<i>Chagrin Falls, O.</i>	122 w.
Oberlin College, 1884 }		
Henry Horace Williams, M.A. }	<i>Sunbury, N. C.</i>	114 w.
University of North Carolina, 1883 }		
John Churchwood Wilson, B.A. }	<i>Philadelphia, Pa.</i>	102 w.
Amherst College, 1885 }		
George Heber Woodhull, B.A. }	<i>Middlefield, Mass.</i>	89 w.
Yale University, 1885 }		

SENIOR CLASS, 29

MIDDLE CLASS

Theodore Davenport Bacon, }	<i>New Haven</i>	31 E.
Sheffield Scientific School }		
Eli Beers, B.A. }	<i>Bridgewater</i>	28 E.
Yale University, 1886 }		
Frederick Widmer Burrows, B.A. }	<i>Wyoming, O.</i>	37 E.
Oberlin College, 1886 }		
Robert Coit Chapin, B.A. }	<i>Beloit, Wisc.</i>	105 w.
Beloit College, 1885 }		
Edward Mortimer Chapman, B.A. }	<i>Old Saybrook</i>	84 w.
Yale University, 1884 }		
Clay Dent Chunn }	<i>Chaptico, Md.</i>	44 E.
Charles Franklin Clarke, B.A. }	<i>Columbia</i>	24 E.
Yale University, 1886 }		
Harlan Creelman, }	<i>York, Me.</i>	41 E.
University of New Brunswick }		
Olaus Dahl, B.A. }	<i>Lochiel, Wisc.</i>	80 w.
Luther College, 1885 }		
George Pomeroy Eastman, B.A. }	<i>Framingham, Mass.</i>	98 w.
Amherst College, 1884 }		
John Lockwood Gentle, B.A. }	<i>Southport, Ind.</i>	47 E.
University of Indiana, 1884 }		

William Griffiths, } Carmarthen College, 1886 }	<i>Cwmlllynfell, South Wales</i>	40 E.
Albert Wellman Hitchcock, M.A. } Amherst College, 1882 }	<i>Kalamazoo, Mich.</i>	13 E.
Robert Murray Hogue, B.A. } University of Pennsylvania, 1886 }	<i>Philadelphia, Pa.</i>	75 W.
Lewis Henry Keller, } Adrian College }	<i>Upper Sandusky, O.</i>	20 E.
William Henry Klose, B.A. } Roanoke College, 1886 }	<i>Mifflinburg, Pa.</i>	38 E.
Luther Kendall Long, PH.B. } Adrian College, 1883 }	<i>Strong City, Kan.</i>	98 Dwight st.
Winfield Scott Manship, B.A. } Wesleyan University, 1886 }	<i>Honeybrook, Pa.</i>	39 E.
Joseph Fairbanks Morse, B.A. } Amherst College, 1884 }	<i>St. Johnsbury, Vt.</i>	113 W.
John Frederic Nicholas, B.A. } Muhlenberg College, 1886 }	<i>Santee, Pa.</i>	74 W.
Manly Dayton Ormes, B.A. } Yale University, 1885 }	<i>Tuscola, Mich.</i>	30 E.
Manasseh Garabed Papazian, B.A. } Central Turkey College, 1882 }	<i>Aintab, Turkey</i>	46 E.
Chas. Benjamin Franklin Pease, B.A. } Williams College, 1886 }	<i>Bushirks, N. Y.</i>	82 W.
George Petry, B.A. } University of Pennsylvania, 1886 }	<i>Philadelphia, Pa.</i>	10 E.
Arthur Stevens Phelps, B.A. } Yale University, 1886 }	<i>New Haven</i>	44 High st.
John Dumont Reid	<i>Indianapolis, Ind.</i>	94 W.
James Gibson Robertson, B.A. } Williams College, 1886 }	<i>Salem, N. Y.</i>	18 E.
Charles Colebrook Sherman, B.A. } Yale University, 1883 }	<i>Syracuse, N. Y.</i>	45 E.
Frank Robinson Shipman, B.A. } Yale University, 1885 }	<i>Hartford</i>	26 E.
Henry Stauffer, } Otterbein University }	<i>Denver, Col.</i>	35 E.
James Hayden Tufts, B.A. } Amherst College, 1884 }	<i>Monson, Mass.</i>	96 W.
Henry William Tuttle, B.A. } Williams College, 1886 }	<i>Otisco, N. Y.</i>	31 E.
Walter Shepard Ufford, M.A. } Amherst College, 1882 }	<i>Boston, Mass.</i>	13 E.
Howard Ridgway Vaughn, B.A. } Wesleyan University, 1886 }	<i>New Egypt, N. Y.</i>	12 E.
Dean Augustus Walker, B.A. } Yale University, 1884 }	<i>Auburndale, Mass.</i>	78 W.
William Wiedenhoeft, B.A. } Oberlin College, 1886 }	<i>Belden, Ind.</i>	112 W.

JUNIOR CLASS

Lucius Olmsted Baird, B.A. }	<i>Chicago, Ill.</i>	118 W.
Yale University, 1885 }		
Frank Clyde Baker, B.A. }	<i>Bay City, Mich.</i>	109 W.
Oberlin College, 1886 }		
Gerald Hamilton Beard, B.A. }	<i>Chicago, Ill.</i>	92 W.
Yale University, 1887 }		
Edwin Victor Bigelow, B.A. }	<i>Seattle, Wash. Terr.</i>	46 E.
University of Washington, 1887 }		
Jesse Levi Bright, }	<i>Columbus, O.</i>	91 W.
Oberlin College }		
Daniel Emery Burtner, B.A. }	<i>West Fairview, Pa.</i>	53 E.
Lebanon Valley College, 1886 }		
Ernest LeRoy Caldwell, B.A. }	<i>Windsor</i>	22 E.
Yale University, 1887 }		
Demas Cochlin, B.A. }	<i>Sidney, O.</i>	115 W.
Ohio Wesleyan University, 1886 }		
Charles Dow Crawford, B.A. }	<i>Springfield, Mo.</i>	115 W.
Drury College, 1887 }		
Arthur Hill Daniels, B.A. }	<i>Millis, Mass.</i>	100 W.
Olivet College, 1887 }		
William Davies, }	<i>Sarn, Wales</i>	4 E.
Haverfordwest Bapt. College }		
Josiah Pope Dickerman, B.A. }	<i>Foxborough, Mass.</i>	70 W.
Amherst College, 1886 }		
Edward Torrey Ford, }	<i>Brockton, Mass.</i>	77 W.
Amherst College }		
David Elmer Ghormley, B.A. }	<i>Partridge, Kan.</i>	2 E.
Wooster University, 1887 }		
Joseph Wallace Gunn, B.A. }	<i>Fergus Falls, Minn.</i>	33 E.
Carleton College, 1886 }		
Lincoln Archer Holp, }	<i>Columbus, O.</i>	49 E.
Otterbein University }		
Edward Payson Holton, B.A. }	<i>Everett, Mass.</i>	76 W.
Amherst College, 1887 }		
Herbert Bacon Hutchins, B.A. }	<i>Brooklyn, N. Y.</i>	120 W.
Harvard University, 1886 }		
Henry McCartney, B.A. }	<i>Nashville, Mich.</i>	100 W.
Olivet College, 1886 }		
Robert Charles Martin, B.A. }	<i>Washington, D. C.</i>	51 E.
Oberlin College, 1887 }		
Julius Adolph Meckel, }	<i>Cleveland, O.</i>	76 W.
Oberlin College }		
James Wilber Moulton, B.A. }	<i>Guilford</i>	33 E.
Bates College, 1887 }		
Edwin Barnes Niver, }	<i>Cazenovia, N. Y.</i>	67 W.
Amherst College }		

Karl Nyqvist, } Theol. Sem. Stockholm }	<i>New Haven</i>	114 Olive st.
Richard Powell, } Bala College }	<i>Dowlais, Wales</i>	121 w.
Edward Tallmadge Root, B.A. } Yale University, 1887 }	<i>Springfield, O.</i>	92 w.
Claudius Milton Severance, M.A. } Middlebury College, 1883 }	<i>Manchester, Vt.</i>	107 w.
Elmer Ellsworth Smiley, B.A. } Syracuse University, 1885 }	<i>North Syracuse, N. Y.</i>	81 w.
Edward Lincoln Smith, B.A. } Yale University, 1886 }	<i>Montpelier, Vt.</i>	8 E.
Joseph Jason Spencer, B.A. } Otterbein University, 1884 }	<i>Westerville, O.</i>	91 w.
Glen Albert Taylor, B.A. } Williams College, 1885 }	<i>Denmark, Iowa</i>	118 w.
William Austin Trow, B.A. } Amherst College, 1886 }	<i>Northampton, Mass.</i>	77 w.
Charles Elliott Watson, B.A. } Union Christian College, 1887 }	<i>Merom, Ind.</i>	41 Beers st.
Eugene Carroll Webster, B.A. } Harvard University, 1887 }	<i>Malden, Mass.</i>	123 w.
Morrison Weimer, B.A. } Lebanon Valley College, 1887 }	<i>Donegal, Pa.</i>	53 E.
George Carl Weiss, } Ripon College }	<i>DePere, Wisc.</i>	50 E.
Schuyler Sampson White, B.A. } Harvard University, 1884 }	<i>Newmarket, N. H.</i>	48 E.

JUNIOR CLASS, 37

SUMMARY.

RESIDENT LICENTIATE,	.	.	.	.	.	1
GRADUATE CLASS,	.	.	.	.	.	14
SENIOR CLASS,	.	.	.	.	.	29
MIDDLE CLASS,	.	.	.	.	.	36
JUNIOR CLASS,	.	.	.	.	.	37
TOTAL,	.	.	.	.	.	117

DEPARTMENT OF MEDICINE

(YALE MEDICAL SCHOOL)

GRADUATE STUDENTS

George Frederick Converse, M.D. }	<i>New Haven</i>	29 Dixwell av.
Yale University, 1887 }		
Joseph Hendley Townsend, M.D. }	<i>New Haven</i>	45 Martin st.
Yale University, 1887 }		
Frank Van Allen, M.D. }	<i>Ravenswood, Ill.</i>	15 E.
Yale University, 1887 }		

GRADUATE STUDENTS, 3

SENIOR CLASS

Edward Charles Beach	<i>Seymour</i>	70 Howe st.
Thomas Matthew Cahill	<i>New Haven</i>	227 Franklin st.
Charles Ross Jackson	<i>New Haven</i>	131 Howe st.
Daniel Albion Jones, B.A. }	<i>East Haven</i>	69 High st.
Yale University, 1884 }		
Harry Ranney Stiles	<i>Middletown</i>	149 College st.
William Joseph Sullivan, }	<i>New Haven</i>	72 Olive st.
M.R.C.V.S. London }		

SENIOR CLASS, 6

MIDDLE CLASS

William Peck Andrews	<i>West Haven</i>	69 High st.
Louis Bennett Bishop, B.A. }	<i>New Haven</i>	215 Church st.
Yale University, 1886 }		
Thomas Stoddard Bronson, PH.B. }	<i>New Haven</i>	1460 Chapel st.
Yale University, 1886 }		
Moses Kleiner	<i>New Haven</i>	108 George st.
William Harvey Stowe	<i>New Haven</i>	1575 Chapel st.

MIDDLE CLASS, 5

JUNIOR CLASS

Edward Robinson Baldwin	<i>Cheshire</i>	200 York st.
John Steel Barnes	<i>Oxford</i>	314 York st.
William Patrick John Burke	<i>New Haven</i>	Quinnipiac st.
Herbert Martin Clapp	<i>New Haven</i>	24 Lincoln st.
George Wyckoff Cummins, PH.D. }	<i>Vienna, N. Y.</i>	63 w.
Yale University, 1887 }		
G. Skiff Ford	<i>New Haven</i>	55 Silver st.
Harry Burr Ferris, B.A. }	<i>Sound Beach</i>	113 York st.
Yale University, 1887 }		
Henry Frederic Klenke	<i>New Haven</i>	48 St. John st.
George Washington Lawrence	<i>Pepperell, Mass.</i>	285 York st.
Bismark Robert Pinchback	<i>New Orleans, La.</i>	113 York st.
William Fletcher Stone	<i>New Haven</i>	143 Lamberton st.
William Larned Thacher, B.A. }	<i>New Haven</i>	255 Crown st.
Yale University, 1887 }		

JUNIOR CLASS, 12

SUMMARY

GRADUATE STUDENTS,	.	.	.	.	.	3
SENIOR CLASS,	.	.	.	.	.	6
MIDDLE CLASS,	.	.	.	.	.	5
JUNIOR CLASS,	.	.	.	.	.	12
TOTAL,	.	.	.	.	.	26

DEPARTMENT OF LAW

(YALE LAW SCHOOL)

SENIOR CLASS

Allen Charles Alderman	<i>East Granby</i>	55 Prospect st.
Frederick Augustus Bartlett	<i>Bridgeport</i>	Bridgeport
Benjamin B. Beekman, B.A. }	<i>Jacksonville, Oreg.</i>	161 Orange st.
Oregon State Univ. 1884		
John Marvin Blakeley, PH.B. }	<i>St. Paul, Minn.</i>	1142 Chapel st.
Yale University, 1886		
Wilbur Franklin Booth, B.A. }	<i>New Haven</i>	41 High st.
Yale University, 1884		
Adna Guernsey Bowen, }	<i>Batavia, N. Y.</i>	514 Chapel st.
Attorney at Law		
Hubert Wilson Butler	<i>Des Moines, Iowa</i>	128 High st.
Jonathan Wright Chapin, }	<i>New Haven</i>	490 Chapel st.
Attorney at Law		
James Lewis Cowles, B.A. }	<i>Farmington</i>	1166 Chapel st.
Yale University, 1886		
Clarence Eugene Cundall	<i>Danielsonville</i>	361 Elm st.
William Erwin Davis	<i>New Haven</i>	80 Prince st.
Thomas Mills Day, Jr., B.A. }	<i>Hartford</i>	311 York st.
Yale University, 1886		
William Eugene Dibble	<i>Sandy Hill, N. Y.</i>	335 George st.
John Thomas Fitzgerald	<i>New Haven</i>	16 Orange st.
Allen Boyd Forbes, LL.B. }	<i>Chicago, Ill.</i>	242 York st.
Northwestern Univ. 1886		
Charles Jay Greene, }	<i>Lead City, Dakota</i>	220 Crown st.
Attorney at Law		
Charles Jared Griggs, B.A. }	<i>Waterbury</i>	395 Temple st.
Yale University, 1886		
Stevie Michel Hoye	<i>New Haven</i>	430 Temple st.
James Fawcett Hunt	<i>Hammondsport, N. Y.</i>	19 Home pl.
Patrick Kane	<i>Bridgeport</i>	Bridgeport
Frank Harrison Kelley, Jr.	<i>New Haven</i>	38 Pearl st.
William Krieger, LL.B. }	<i>Louisville, Ky.</i>	514 Chapel st.
Univ. of Louisville, 1887		
Iver Norman Lawson	<i>Chicago, Ill.</i>	126 Wall st.
Daniel Everitt Leary	<i>Enfield</i>	33 Howe st.
Thomas Patrick McCue	<i>Danbury</i>	363 Elm st.
Allen McQuillan	<i>St. Paul, Minn.</i>	1136 Chapel st.

Kojiro Matsugata	<i>Tokio, Japan</i>	363 Elm st.
Robert Vaughn Montague, } Attorney at Law	<i>Glasgow, Mo.</i>	106 York sq.
Porter Cooper Moulton	<i>New Haven</i>	228 Mansfield st.
Charles Herbert Peck	<i>Stratford</i>	Stratford
Robert James Pitkin, B.A. } Yale University, 1885, Attorney at Law	<i>Denver, Col.</i>	1173 Chapel st.
William Elisha Prentice, B.S. } Rochester University, 1884 Attorney at Law	<i>Batavia, N. Y.</i>	514 Chapel st.
Clement Darling Rinehart	<i>Fredericktown, O.</i>	421 Temple st.
George Washington Robinson	<i>New Haven</i>	137 Edwards st.
James Edward Russell, B.A. } St. Johns College, 1886	<i>Waterbury</i>	6 Olive st.
Arthur Leffingwell Shipman, B.A. } Yale University, 1886	<i>Hartford</i>	26 E.
Robert Wright Stewart, B.S. } Coe College, 1886	<i>Cedar Rapids, Ia.</i>	421 Temple st.
Lyman Twining Tingier	<i>Thompson</i>	157 Orange st.
Soichi Tsuchiya	<i>Tokio, Japan</i>	99 Greene st.
Bacon Wakeman	<i>Fairfield</i>	Fairfield
Howard Nichols Wakeman, } Attorney at Law	<i>Bridgeport</i>	Bridgeport

SENIOR CLASS, 41

JUNIOR CLASS

William Maitland Abell, B.A. } Yale University 1887	<i>Lebanon</i>	157 Orange st.
Herbert Gorse Andrews	<i>New York City</i>	55 Prospect st.
George Ansel Austin	<i>New Haven</i>	9 Warren st.
Willoughby Maynard Babcock, B.A. } Yale University, 1887	<i>New Haven</i>	86 Broadway
Rodmond Vernon Beach, B.A. } Yale University, 1887	<i>New Haven</i>	320 Temple st.
George Emerson Beers, B.A. } Trinity College, 1886	<i>Bridgeport</i>	Bridgeport
Lewis Sherrill Bigelow, B.A. } Yale University, 1887	<i>St. Paul, Minn.</i>	1142 Chapel st.
Nathaniel Wheeler Bishop	<i>Bridgeport</i>	Bridgeport
Andrew Julius Brown, Jr.	<i>Yalesville</i>	Yalesville
James Joseph Buchanan	<i>New Haven</i>	12 Sylvan av.
Edward Grant Buckland, B.A. } Washburn College, 1887	<i>Great Bend, Kan.</i>	Royton House

Alfred Coit, B.A. }	<i>New London</i>	407 Temple st.
Yale University, 1887 }		
Alfred Cowles, Jr., B.A. }	<i>Chicago, Ill.</i>	1173 Chapel st.
Yale University, 1886 }		
William Hutchinson Cowles, B.A. }	<i>Chicago, Ill.</i>	59 w.
Yale University, 1887 }		
Henry Maurice Danneel	<i>New Orleans, La.</i>	121 York st.
John Ambrose Doolittle	<i>New Haven</i>	219 Orange st.
Joseph Osterman Dyer, PH.B. }	<i>Galveston, Tex.</i>	107 York st.
Yale University, 1886 }		
Harris Gilbert Eames	<i>West Haven</i>	West Haven
Sterling Hull Fanton	<i>Danbury</i>	123 Wooster st.
Andrew Frink Gates, B.A. }	<i>Lebanon</i>	64 w.
Yale University, 1887 }		
Frederic William Grau	<i>Brooklyn, N. Y.</i>	150 Orange st.
James Henry Hayden, PH.B. }	<i>Lake George, N. Y.</i>	126 Wall st.
Yale University, 1887 }		
Frederick James Holmes	<i>Wallingford</i>	Wallingford
Seikichi Iwaski	<i>Tokio, Japan</i>	339 George st.
Frank Dyer Jackson, M.A. }	<i>Janesville, Wisc.</i>	107 D.
Beloit College, 1887 }		
Edward Kerrison, }	<i>Charleston, S. C.</i>	42 Elm st.
Attorney at Law }		
Samuel Knight, B.A. }	<i>Oakland, Cal.</i>	59 w.
Yale University, 1887 }		
Daniel Andrew McWilliams	<i>New Haven</i>	16 Hamilton st.
John Lewis Morehouse	<i>Fairfield</i>	Fairfield
Toshitake Okubo	<i>Tokio, Japan</i>	121 York st.
Henry Wilber Parker	<i>Paterson, N. J.</i>	123 Wooster st.
Arthur Reed Pennell, B.A. }	<i>New Haven</i>	1010 Chapel st.
Yale University, 1887 }		
Thomas Henry Penney, B.A. }	<i>New Haven</i>	1010 Chapel st.
Yale University, 1887 }		
Arthur Perkins, B.A. }	<i>Hartford</i>	114 College st.
Yale University, 1887 }		
Charles Wheeler Pierson, B.A. }	<i>Florida, N. Y.</i>	311 York st.
Yale University, 1886 }		
Richard Paul Rendler	<i>New Haven</i>	189 Church st.
Virgil Eugene Rorer	<i>Philadelphia, Pa.</i>	342 Howard av.
Frank Fenner Russell, B.A. }	<i>Woodstock</i>	307 George st.
Trinity College, 1885 }		
Oliver Perry Scaife, Jr.	<i>Allegheny, Pa.</i>	1090 Chapel st.
William Dick Shupe, B.S. }	<i>Mt. Pleasant, Pa.</i>	24 Orange st.
Lebanon Valley College }		
Philip Battell Stewart, B.A. }	<i>Middlebury, Vt.</i>	1173 Chapel st.
Yale University, 1886 }		

Carlos Hotchkiss Storrs, B.A. } Wesleyan University, 1887	<i>Seymour</i>	150 Orange st.
William Trumbull, B.A. } Yale University, 1883	<i>Valparaiso, Chili</i>	83 Grove st.
Thomas Clifford Waterous	<i>Hartford</i>	1010 Chapel st.
Albert Jacob Wise	<i>Lima, O.</i>	562 Chapel st.
JUNIOR CLASS, 45		

GRADUATE STUDENTS

Charles Russell Burnham, LL.B. } Yale University, 1887	<i>Hartford</i>	1010 Chapel st.
Livingston Warner Cleaveland, LL.B. } Yale University, 1881	<i>New Haven</i>	218 York st.
Charles Henry Hayden, LL.B. } Yale University, 1887	<i>Winsted</i>	476 Chapel st.
George Dutton Watrous, M.L. } Yale University, 1884	<i>New Haven</i>	24 College st.
Eben Whitney, Jr., LL.B. } Yale University, 1887	<i>Glassboro, N. J.</i>	117 Elm st.
GRADUATE STUDENTS, 5		

SPECIAL STUDENTS

Jacquelin S. Holliday, B.S. } Racine College, 1887	<i>Indianapolis, Ind.</i>	133 College st.
Robert Lindell Jones	<i>Chicago, Ill.</i>	1002 Chapel st.
John Norton Pomeroy, B.A. } Yale University, 1887	<i>San Francisco, Cal.</i>	83 Grove st.
SPECIAL STUDENTS, 3		

SUMMARY

SENIORS,	41
JUNIORS,	45
GRADUATE STUDENTS,	5
SPECIAL STUDENTS,	3
TOTAL,	94

SUMMARY OF STUDENTS

DEPARTMENT OF PHILOSOPHY AND THE ARTS:

GRADUATE COURSES	-	-	-	69	
YALE COLLEGE	-	-	-	614	
SHEFFIELD SCIENTIFIC SCHOOL	-			291	
ART SCHOOL	-	-	-	58	
				<hr style="width: 50px; margin-left: 0;"/>	1032
YALE DIVINITY SCHOOL	-	-	-	-	117
YALE MEDICAL SCHOOL	-	-	-	-	26
YALE LAW SCHOOL	-	-	-	-	94
				<hr style="width: 50px; margin-left: 0;"/>	1269
Deduct for names inserted twice	-			24	
				<hr style="width: 50px; margin-left: 0;"/>	
TOTAL	-	-	-	-	1245

DEGREES CONFERRED IN 1887

BACHELORS OF ARTS

William Maitland Abell	Robert Nelson Corwin
Charles Adams	William Hutchinson Cowles
Chandler Parsons Anderson	Alexander Brown Coxe
James Archbald, Jr.	John Cullinan, Jr.
Arthur John Arn	Joseph Thomas Cunningham
Willoughby Maynard Babcock	John Hubbard Curtis
Edward Sawyer Bacon	Thomas Hamlin Curtis
Rodmond Vernon Beach	Henry Alexander Dann
Gerald Hamilton Beard	John Caspar Diehl
John Bennetto	Willard Robinson Douglass
Elmer Fox Berkele	Clarence Clark Ferris
Lewis Sherrill Bigelow	Harry Burr Ferris
Leslie Dayton Bissell	Frederic Wilson Francis
Edward Lydston Bliss	Bernard Francis Gaffney
Allan Blair Bonar	Robert Alexander Gardiner
Dwight Eliot Bowers	Andrew Frink Gates
Arthur Wolfe Brady	John Minor Gillespie
William Sinclair Brigham	Clarence Glisan
Wilson Brooks	Edw. Winchester Goodenough
Carleton Lewis Brownson	Madison Grant
Edward Lathrop Burke	Robert Beers Gray
William Savage Burns	George Henry Guernsey
Ernest LeRoy Caldwell	William Jessup Hand
Middleton Arnold Caldwell	Henry Earl Hard
Victor Bush Caldwell	Clinton Larue Hare
Schuyler Casemate Carlton	Frederic Wells Hart
Walter Boughton Chambers	Horace Sedgwick Hart
Frederick Starkweather Chase	Clifford Wayne Hartridge
Francis Asbury Christian	George Griswold Haven, Jr.
Francis Cameron Clarke	Robert Forbes Hawkes
Sanford Ellsworth Cobb	Frederick Trevor Hill
Frank Cochran	George Edwin Hill
Alfred Coit	Charles Mills Hinkle
Ira Clifton Copley	Clarke Wesley Holly
William Aaron Cornish	Frank Clifford Howe

John Howard Hume
Albert Gay Hunt
DeWitt Clinton Huntington
Louis Kepler Hyde
Obed Wilson Irvin
Henry Ivison
Robert Irving Jenks
Charles Bulkley Jennings
Oliver Gould Jennings
Allen Wardner Johnson
Charles Keeler
John Bassett Keep
William Burrage Kendall, Jr.
William Kent
Henry Belden Ketcham
John Scott King
John Henry Kirkham
Charles Asher Knight
Samuel Knight
Yan Phou Lee
Alfred Leeds
Frank Dodge Leffingwell
John Leverett
Robert Hart Lewis
Charles Henry Ludington, Jr.
William Howard Ludington
Harry Lyne
James McCormick, Jr.
William McCormick
Robert Maxwell
Henry Lawton May
Frank Adams Meacham
Joseph Weed Middlebrook
Richard Dana Morse, Jr.
George Francis Nesbitt
Edward Hiram Norton, Jr.
Homer Tomlinson Partree
Louis Harman Peet
Arthur Reed Pennell
Thomas Henry Penney
Thomas Norwood Penrose

Arthur Perkins
Herbert Farrington Perkins
George Daniel Pettee
William Lyon Phelps
Frederic Smith Pickett
Robert William Playford
John Norton Pomeroy
Thomas Wyman Porter
Albert Richard Pritchard
John Rogers, Jr.
Benjamin Romaine
Edward Tallmadge Root
Isaac Grant Rosenzweig
Charles Otis Scoville
William Albert Setchell
Lewis Seymour
James Rockwell Sheffield
Walter Bradley Sheppard
John Calhoun Simonds
Frank Clifton Smith
Paul Spencer
Fred Sprague
William Cromwell Sprague
Edward Staehlin
Maximilian Lincoln Stein
William Pirrie Taylor
William Larned Thacher
Richard Simms Thomas
Joseph Lyle Thornton, Jr.
Charles Louis Torrey
Howard Crosby Tracy
Elford Parry Trowbridge
Francis Bacon Trowbridge
Wm. R. Hayes Trowbridge, Jr.
Frank Day Tuttle
James Johnston Waring, Jr.
William Xenophon Weed
Frederic Roger Whittlesey
Frederick Searle Woodward
George Stanley Woodward
George Hurlbut Young

MASTERS OF ARTS

George Edward Curtis, B.A.	}	Charles Newton Morris, B.A.	}
Yale University 1882	}	Yale University 1882	}
Robert Harrison Cornish, B.A.	}	Wolf Willner, B.A.	}
Yale University 1883	}	Yale University 1885	}

BACHELORS OF PHILOSOPHY

Henry Frederick Adams	Frederick Sheffield Kellogg
Robert Clayton Augur	Grayson Guthrie Knapp
Elmer Ellsworth Bennett	Edward Linsley Maltby
Herbert Spencer Bullard	Harley James Morrison
Richard Augustus Chapman	William Partridge Ordway
William Henry Coburn	Edmund Bishop Patterson
Harry Fitch Coleman	Frank Adelbert Paul
Lewis Atterbury Conner	Charles Eugene Phillips
David Mark Cummings	William Thomas Rainey
Julius Gilbert Day	Harris Smith Reynolds
William Greenhow Doane	John Robert Wheaton Sargent
Edward Warburton Durant, Jr.	William Marcelin Scaife
Isadore Dyer, Jr.	Edwin Coupland Shaw
Arthur Mansfield Everit	Oscar Harmon Short
Raymond Thomson French	Edward Arthur Smith
Francis Frederic Georger	Francis Timothy Smith
Robert Fisher Gibson	Frank Mansfield Smith
Charles Joseph Goldmark	Erwin Starr Sperry
Wilfred Elizur Griggs	Merton Pierpont Stevens
George Conradt Ham	Arthur Peale Summers
Edgar Burton Harger	Alfred John Wakeman
Herbert Leopold Hart	Frank Otto Walther
James Henry Hayden	Nathaniel P. Washburn
William Brisbane Hickox	Frank Warren Wentworth
Marvin D. Hubbell	Charles Percy Willcox
Joseph Cooke Jackson, Jr.	Edward Gilbert Williams
Lawrence Bates Jenckes	George Henry Wood
Leonard Abbot Jenkins	Robert McKnight Woods
Charles Sherman Jewett	

MECHANICAL ENGINEERS

Duane Judson Kelsey, P.H.B.	}	Curtiss Chauncey Turner, P.H.B.	}
Yale University 1884	}	Yale University 1885	}
Sidney Armour Reeve, P.H.B.	}		
Yale University 1885	}		

DOCTORS OF PHILOSOPHY

Erwin Hinckley Barbour, B.A. }	Julius Howard Pratt, Jr., B.A. }
Yale University 1882 }	Yale University 1882 }
George Wyckoff Cummins, PH.B. }	William Everett Waters, B.A. }
Yale University 1884 }	Yale University 1878 }

BACHELORS OF DIVINITY

James Wilson Bixler, B.A. }	George Raynolds Mathews, B.A. }
Amherst College 1882 }	Western Reserve University 1884 }
Avedis Mesrob Boolgoorjoo	Robert Calfe Morse, B.A. }
Henry Eldridge Bourne, B.A. }	Knox College 1884 }
Yale University 1883 }	John Henry Müller, B.A. }
Howard Allen Bridgman, B.A. }	Lebanon Valley College 1884 }
Amherst College 1883 }	Rikizo Nakashima, B.A. }
James Franklin Cross, B.A. }	Western Reserve University 1884 }
Western Reserve Univ. 1884 }	Edward Smith Parsons, M.A. }
James Wallace Dow	Amherst College 1883 }
John Dunlap, B.A. }	George Foster Prentiss, B.A. }
College of New Jersey 1882 }	Amherst College 1884 }
Walter March Ellis, B.A. }	Orrin Lucius Robinson, B.L. }
Tabor College 1882 }	Carleton College 1883 }
Henry Martyn Herrick, B.A. }	Dwight Clinton Stone
Amherst College 1884 }	Ward Taylor Sutherland, M.A. }
Horace George Hoadley, B.A. }	University of Rochester 1878 }
Yale University 1883 }	Henry Seibels Wannamaker, B.A. }
John Morris James	Wofford College 1884 }
George William Judson, B.A. }	Charles Terrill Whittlesey, B.A. }
Yale University 1884 }	Amherst College 1883 }
John McKee, B.A. }	
Butler University 1884 }	

DOCTORS OF MEDICINE

Robert Seymour Bradley, B.A. }	Warren Chamberlin McFarland
Yale University 1885 }	Stephen John Maher
George Frederick Converse	Joseph Hendley Townsend, B.A. }
Augustin Averill Crane, B.A. }	Yale University 1885 }
Yale University 1885 }	Frank Van Allen, B.A. }
Edward Michael McCabe, B.A. }	Yale University 1885 }
Manhattan College 1884 }	

BACHELORS OF LAWS

Visscher Vere Barnes, } (<i>cum laude</i>) }	James Benjamin Keogh, B.A. }
Charles Russell Burnham	Yale University 1885 (<i>cum laude</i>) }
William George Buteau	Frank James Lawler, B.A. }
James Nicholas Cannon	Georgetown College }
Prentice William Chase	Orison Perry Lee, M.A. }
George Ashbille Clark	Kansas College 1881 }
Leonard Mayhew Daggett, B.A. }	Warner Thornton McGuinn, B.A. }
Yale Univ. 1884 (<i>magna cum laude</i>) }	Lincoln University 1884 }
Edward Downes	James Henry O'Rourke
Horace Shermon Eaton	Edward Isaac Sanford, Jr., B.A. }
Jacob Philip Goodhart, PH.B. }	Yale University 1884 }
Yale University 1885 }	Bradley Varnum Sargent, Jr., S.M. }
John Harrison, }	Santa Clara College 1885 }
(<i>cum laude</i>) }	Shunzo Sawada
Charles Henry Hayden	Harry Morgan Stanley
Frederick Whittlesey Hilliard	Eli Frank Thompson
Carleton Edson Hoadley	Eben Whitney, Jr.
Benjamin Franklin James, B.A. }	Frederic Meeker Williams
University of Chicago 1884 }	Isaac Wolfe

MASTERS OF LAWS

Henry Philip Farnham, LL.B. }	Seijiro Sho, LL.B. }
National University 1885 }	Tokio University 1885 }
Charles Burnell Hawkes, LL.B. }	Ervin Llewellyn Thorpe, LL.B. }
Yale University 1883 }	Iowa State University 1879 }
John McKean, LL.B. }	
Yale University 1886 }	

HONORARY DEGREES:

BACHELOR OF ARTS

Macgrane Coxé

BACHELORS OF DIVINITY

Rev. Lauren Matthew Foster
 Rev. Edward Pierpont Herrick
 Rev. David Evan Jones

DOCTORS OF DIVINITY

- Rev. John Brown, of Bedford, England
 Rev. Francis Greenwood Peabody, B.A. Harvard University 1869,
 Professor in Harvard College
 Rt. Rev. Elisha Smith Thomas, B.A. 1858, Assistant Bishop of the
 Protestant Episcopal Church in Kansas

DOCTORS OF LAWS

- John Sheldon Beach, B.A. 1839
 Chauncey Mitchell Depew, B.A. 1856
 Hon. Orville Hitchcock Platt, United States Senator from Connecticut
 Hon. John Randolph Tucker, late Representative in Congress from
 Virginia

MASTERS OF ARTS

- Rev. Albert Barnes, of Pasumalai, India
 Rev. Newell Meeker Calhoun, B.D. Yale University 1874
 William Bates Davenport
 Frank Austin Gooch, B.A. Harvard University 1872
 Zephaniah Swift Holbrook
 Rev. George Anson Jackson, Ph.B. Yale University 1868
 James Brown Olney

APPOINTMENTS FOR COMMENCEMENT,

YALE COLLEGE, JUNE 29, 1887

ORATIONS

THOMAS HAMLIN CURTIS
 EDWARD TALLMADGE ROOT
 CARLETON LEWIS BROWNSON
 JOHN HUBBARD CURTIS
 HARRY LYNE
 JOHN BENNETTO
 JAMES ARCHBALD, JR.
 WILLIAM AARON CORNISH
 { JOHN NORTON POMEROY
 { WILLIAM ALBERT SETCHELL

[The names in the following groups are in alphabetical order.]

Willoughby Maynard Babcock
Gerald Hamilton Beard
Edward Lydston Bliss
John Caspar Diehl
Harry Burr Ferris

William Jessup Hand
Yan Phou Lee
William Lyon Phelps
Isaac Grant Rosenzweig

William Savage Burns
Henry Alexander Dann
Frederic Wells Hart
Robert Irving Jenks
Samuel Knight

Frank Dodge Leffingwell
Clarence Tomlinson Morse
Herbert Farrington Perkins
George Daniel Pettée
Frederic Roger Whittlesey

DISSERTATIONS

Arthur Wolfe Brady
Clarence Clark Ferris
Frederic Wilson Francis
Charles Bulkley Jennings
Robert Hart Lewis
Frank Clifton Smith

Paul Spencer
Maximilian Lincoln Stein
William Larned Thacher
Richard Simms Thomas
Howard Crosby Tracy
William Xenophon Weed

DISPUTES

Elmer Fox Berkele
Frederick Starkweather Chase
Ira Clifton Copley
Robert Beers Gray
Henry Earl Hard
DeWitt Clinton Huntington
Allen Wardner Johnson
John Henry Kirkham

John Leverett
Charles Henry Ludington, Jr.
Arthur Reed Pennell
Frederic Smith Pickett
Thomas Wyman Porter
Benjamin Romaine
Frederick Searle Woodward

Dwight Eliot Bowers
Edward Lathrop Burke
Alfred Coit
Willard Robinson Douglass
John Minor Gillespie
Clarence Glisan
Edward Winchester Goodenough
Clinton Larue Hare
George Edwin Hill

Frank Clifford Howe
John Howard Hume
John Scott King
Charles Asher Knight
Joseph Weed Middlebrook
Thomas Norwood Penrose
John Rogers, Jr.
Walter Bradley Sheppard

COLLOQUIES

William Maitland Abell
Sanford Ellsworth Cobb
Andrew Frink Gates
Madison Grant
Obed Wilson Irvin
Henry Belden Ketcham
Robert Maxwell

Edward Hiram Norton, Jr.
Homer Tomlinson Partree
Thomas Henry Penney
Lewis Seymour
James Rockwell Sheffield
Edward Staehlin

Arthur John Arn
Schuyler Casemate Carlton
Robert Nelson Corwin
Joseph Thomas Cunningham
Bernard Francis Gaffney
Albert Gay Hunt

William McCormick
Henry Lawton May
Frank Adams Meacham
Richard Dana Morse, Jr.
Arthur Perkins
Francis Bacon Trowbridge

SPECIAL HONORS

TWO-YEAR HONORS

In Ancient Languages:

Willoughby Maynard Babcock
 Thomas Hamlin Curtis
 Clarence Clark Ferris
 John Norton Pomeroy
 Frederic Roger Whittlesey

In Natural and Physical Science:

John Leverett
 Frank Dodge Leffingwell
 William Albert Setchell

In Mathematics:

William Aaron Cornish

ONE-YEAR HONORS

In Philosophy:

Gerald Hamilton Beard
 John Hubbard Curtis
 John Caspar Diehl
 William Lyon Phelps
 Edward Tallmadge Root

In Political Science, History, and Law:

Willoughby Maynard Babcock
 Alfred Coit
 Henry Alexander Dann
 Yan Phou Lee
 Isaac Grant Rosenzweig

In English:

Gerald Hamilton Beard
 Carleton Lewis Brownson
 John Hubbard Curtis
 Yan Phou Lee
 Clarence Tomlinson Morse
 William Lyon Phelps

In Natural and Physical Science:

Edward Winchester Goodenough
 Paul Spencer

APPOINTMENTS FOR JUNIOR EXHIBITION,

YALE COLLEGE, MARCH 22, 1887

PHILOSOPHICAL ORATIONS

JOHN FRANKLIN CARTER
 CHARLES EDWARD CORNWALL
 IRVING FISHER
 ORLAND SIDNEY ISBELL
 BERNARD CHRISTIAN STEINER
 HENRY LEWIS STIMSON

ORATIONS

Edward Francis Ayres
 William Pitt Baldwin
 Jesse Hatch Behrends
 Henry Barnard Brownell
 Harlan Ward Cooley
 Edward Sherman Farrington
 Edward Colton Fellowes

Theodore Lockwood Leverett
 Harry Weber McCauley
 Harold VanMeter Ogden
 Harrison Gray Platt
 Fred Palmer Solley
 Henry Ebenezer Stevens, Jr.

Philip Dibble Bunce
 Daniel Bailey Hardenbergh
 William Loving, Jr.
 Frederic William Mar
 Duncan Salisbury Merwin

Carl Meyer
 William Andrews Parshall
 Elbert Reynolds Tillinghast
 Herbert Cushing Tolman

DISSERTATIONS

Leonard Woolsey Bacon, Jr.	Gard Maynard
Asa Oran Gallup	Philip Pond
Eugene Wendell Harter	Edward Seymour Thomas
Moses Jacob Husinsky	Frank Burr Tibbals
Clarence Wyman Lincoln	Morrison Remich Waite, Jr.

DISPUTES

Hallock Calvin Alvord	George Barber Fowler
George Olney Brott	Alfred Hand, Jr.
Laurance Johnson Carmalt	Frank Lincoln Woodward
Willis Gaylord Cosad	

William Spencer Clark	Frank Vincent Millard
Hervey Richards Franklin	Arthur Lewis Moore
Charles Allen Klotz	James Robert Seeley
James Howard McMillan	Leo Stein

COLLOQUIES

Winthrop Grant Bushnell	Alfred Raymond
William Campbell	William Henry Seward, Jr.
George Metcalf Gill	Edward Albert Stevenson
Frank Rufus Herrick	Hector William Thomas
Richard Melancthon Hurd	Frank Lincoln Thompson
John Jacob Kutz	

William Bascom Bissell	George Madison Pavey
Arthur Kennard Buxton	Thomas Emerson Ripley
Benjamin Austin Cheney	Frederic Augustus Stevenson
Harry Hall Covell	William Stephen Stone
Henry Huntley Haight	Samuel Johnson Walker
Charles Neave	Ephraim Miller Youmans

UNDERGRADUATE SCHOLARS OF THE HOUSE, YALE
COLLEGE, FOR THE YEAR 1887-88:

WOOLSEY Scholar, Class of 1888—THEODORE LOCKWOOD LEVERETT.
 WOOLSEY Scholar, Class of 1889—HORACE FLETCHER WALKER.
 WOOLSEY Scholar, Class of 1890—CHARLES FRANCIS SMALL.
 HURLBUT Scholar, Class of 1890—LEWIS SCOFIELD HASLAM.
 THIRD Freshman Scholar, Class of 1890—WALTER ALDEN DeCAMP.

UNIVERSITY PRIZES, AWARDED IN JUNE, 1887:

JOHN A. PORTER Prize—Edward M. Chapman, B.A., of the Junior
 Class of the Divinity School, with honorable mention of Leonard
 M. Daggett, B.A., of the Senior Class in the Law School.
 COBDEN CLUB Medal, Class of 1887—ARTHUR W. BRADY, of the Acad-
 emical Department.

PREMIUMS AWARDED IN YALE COLLEGE DURING THE
YEAR 1886-87:

DEFOREST Medal, Class of 1887—John Bennetto.

TOWNSEND Premiums, Class of 1887—Gerald H. Beard, Allen W. Johnson, Louis H. Peet, Herbert F. Perkins, William L. Phelps.

SENIOR MATHEMATICAL Prizes, Class of 1887—1st Prize, Harry Lyne; 2d Prizes, William A. Cornish, Frank D. Lefingwell.

SCOTT Prize in German, Class of 1887—William X. Weed.

SCOTT Prize in French, Class of 1888—William Loving, Jr.

WINTHROP Prizes, Class of 1888—1st Prize, Frank L. Thompson; 2d Prize, divided between Bernard C. Steiner and Herbert C. Tolman.

JUNIOR EXHIBITION Prizes, Class of 1888—1st Prize, Henry L. Stimson; 2d Prizes, Laurance J. Carmalt, Irving Fisher, George B. Fowler, Eugene W. Harter, Orland S. Isbell, Fred P. Solley, Frank L. Woodward.

COMPOSITION Prizes, Class of 1889—1st Prizes, Arthur M. Hyde, Edmund D. Scott, Thomas G. Shearman; 2d Prizes, Samuel N. Pond, Ferdinand Schwill, Charles A. Valentine; 3d Prizes, Lester Bradner, Jr., Albert M. Freeman, William A. McQuaid, Hubert W. Wells.

DECLAMATION Prizes, Class of 1889—1st Prize, Hubert W. Wells; 2d Prizes, Thomas E. Donnelley, Lewis S. Welch; 3d Prizes, Fred N. Lindsay, Thomas G. Shearman.

MATHEMATICAL Prizes, Class of 1889—2d Prizes, Edward B. Hinckley and William A. McQuaid; 3d Prize, Charles W. Lefler.

MATHEMATICAL Prizes, Class of 1890—1st Prize, Albert C. Crehore; 2d Prizes, William C. Lusk and Charles F. Small; 3d Prize, Charles B. Bliss.

BERKELEY PREMIUMS, Class of 1890—1st Grade, John W. Corwith, Walter A. DeCamp, Walton Dennis, Charles F. Lester, Harry L. Munger, Charles F. Small; 2d Grade, Roger S. Baldwin, Harry J. Bardwell, John Crosby, Jr., George H. Hotaling, Elmo H. Keyes, Edward M. Shelton.

HUGH CHAMBERLAIN Greek Prize, Class of 1891—John J. Cox, from Phillips Academy, Andover, Mass.; Honorable Mention is also made of William P. Graves, from Phillips Academy, Andover, Mass., William N. Thatcher, from the Hopkins Grammar School, New Haven, Conn., and Howard T. Kingsbury, from Mr. Duane S. Everson's School, New York City.

PREMIUMS AWARDED IN THE SHEFFIELD SCIENTIFIC
SCHOOL DURING THE YEAR 1886-87:

Class of 1887:

- FOR EXCELLENCE IN CIVIL ENGINEERING—Prize divided between Edgar B. Harger and Edward G. Williams, with honorable mention of Frink M. Smith.
- FOR EXCELLENCE IN DYNAMIC ENGINEERING—Robert F. Gibson, with honorable mention of Robert C. Augur and Edward L. Maltby.
- FOR EXCELLENCE IN GERMAN—Edgar B. Harger.

Class of 1888:

- FOR EXCELLENCE IN THE MATHEMATICS OF JUNIOR YEAR—Prize divided between Edwin H. Lockwood and Percy F. Smith, with honorable mention of Morgan Walcott.

Class of 1889:

- FOR EXCELLENCE IN ALL THE STUDIES OF THE FRESHMAN YEAR—John A. Hartwell.
- FOR EXCELLENCE IN CHEMISTRY—Frederick H. Ellsworth, with honorable mention of Gustave E. Huttelmaier, George A. Lund, and Charles E. Stone.
- FOR EXCELLENCE IN PHYSICS—John A. Hartwell, with honorable mention of Frederick H. Ellsworth, Lloyd W. Fisher, William B. Morrison, and William B. Newberry.
- FOR EXCELLENCE IN GERMAN—Charles E. Stone.
- FOR EXCELLENCE IN MECHANICAL DRAWING—Prize divided between Frederick H. Ellsworth, Lloyd W. Fisher, and Gustave E. Huttelmaier.
- FOR EXCELLENCE IN MATHEMATICS—Prize divided between Gustave E. Huttelmaier and Kenyon V. Painter.
- FOR EXCELLENCE IN ENGLISH COMPOSITION—1st Prizes, William D. Carter and William B. Newberry; 2d Prizes, Mark S. Bradley, Gustave E. Huttelmaier, and William B. Morrison; 3d Prizes, Arthur S. Cheney, Lloyd W. Fisher, and Guthrie M. Wilson.

PRIZES AWARDED IN THE YALE MEDICAL SCHOOL, 1887:

- KEESE PRIZE, Class of 1887—John Stephen Maher.
- PRIZE IN OBSTETRICS, Class of 1887—Joseph H. Townsend, B.A.

PRIZES AWARDED IN THE YALE LAW SCHOOL, 1887:

TOWNSEND PRIZE (\$100), for pronouncing the best oration at graduation
—Warner Thornton McGuinn, B.A.

Committee of Award: Hon. Edwards Pierrepont, LL.D., N. Y. City;
Hon. Stanley Matthews, LL.D., Washington, D.C.;
Hon. Lyman D. Brewster, Danbury.

JEWELL PRIZE (\$50), for the best examination at graduation—Leonard
Mayhew Daggett, B.A.

O. S. SEYMOUR PRIZE (\$60), to that member of the graduating class who
has made the greatest improvement in scholarship during both
years of his course—Eben Whitney, Jr.

BETTS PRIZE (\$50), to the member of the Junior Class receiving the
highest marks at his annual examination—Wilbur Franklin
Booth, B.A.

HONORS:

SENIOR CLASS:

Degree of LL.B., *magna cum laude*.

Leonard Mayhew Daggett, B.A.

Degree of LL.B., *cum laude*.

Visscher Vere Barnes, John Harrison, B.A., James Benjamin Keogh,
B.A., Eben Whitney, Jr.

JUNIOR CLASS:

Honorable mention for excellence at the annual examination:

Wilbur Franklin Booth, B.A., Benjamin B. Beekman, B.A., Thomas
Mills Day, Jr., B.A., Clement Darling Rinehart, Arthur Leffing-
well Shipman, B.A., Robert Wright Stewart, B.A.

DIRECTORY OF OFFICERS

ABBOTT, FRANK F., Tutor	153 F.	CUMMINS, G. WYCKOFF, Instructor	63 w.
BAILEY, MARK, Instructor	(150 F.) 442 Temple st.	CUSHING, WM. L., Instructor	87 N. M.
BALDWIN, SIMEON E., Professor	(25 White's B'ld'g.) 44 Wall st.	DAGGETT, WM. G., Lecturer	22 College st.
BARNEY, SAMUEL E., Instructor	194 Orange st.	DANA, EDWARD S., Professor	(4 P.) 111 Grove st.
BAUR, GEORGE, Assistant	(9 P.) 485 Elm st.	DANA, JAMES D., Professor	(6 P.) 24 Hillhouse av.
BECKWITH, FRANK E., Professor	139 Church st.	DAY, GEORGE E., Professor	(5 E.) 125 College st.
BEEBE, WILLIAM, Ass't. Professor	83 Wall st.	DEXTER, FRANKLIN B., Secretary	(Library) 178 Prospect st.
BEECHER, CHARLES E., Assistant	9 P.	DUBOIS, A. JAY, Professor	(34 N. S. H.) 258 Bradley st.
BEERS, HENRY A., Professor	(171 F.) 25 Vernon st.	DWIGHT, TIMOTHY, President	(7 TR.) 126 College st.
BENDELARI, GEO., Ass't. Professor	5 S.	EATON, DANIEL C., Professor	(41 N. S. H.) 70 Sachem st.
BOURNE, EDWARD G., Instructor	36 E.	ELKIN, WM. L., Astronomer	477 Prospect st.
BRASTOW, LEWIS O., Professor	(3 E.) 128 Wall st.	FARNAM, CHARLES H., Assistant	28 Hillhouse av.
BREWER, WM. H., Professor	(4 S. H.) 246 Orange st.	FARNAM, HENRY W., Professor	43 Hillhouse av.
BRIDGMAN, WALTER R., Tutor	21 S.	FISHER, GEORGE P., Professor	(9 E.) 27 Hillhouse av.
BROWN, ROBERT, Secretary	Observatory pl.	FLEISCHNER, HENRY, Lecturer	928 Grand av.
BRUSH, GEORGE J., Professor	(3 S. H.) 14 Trumbull st.	FOSTER, JOHN P. C., Instructor	109 College st.
CAMPBELL, JAMES, Professor	Hartford	FOSTER, ROGER, Lecturer	N. Y. City
CARMALT, WM. H., Professor	87 Elm st.	GIBBS, J. WILLARD, Professor	(Sloane Lab'y.) 121 High st.
CHITTENDEN, RUSSELL H., Prof.	(7 S. H.) 83 Trumbull st.	GOOCH, FRANK A., Professor	180 Whitney av.
CLARK, JOHN E., Professor	(40 N. S. H.) 30 Trumbull st.	GOODRICH, FRANK P., Instructor	(187 C.) 26 Trumbull st.
COLLIER, M. DWIGHT, Lecturer	N. Y. City		

- HADLEY, ARTHUR T., Professor
51 Whitney av.
- HALL, ASAPH, JR., Assistant
Observatory
- HARPER, ROBERT F., Instructor
135 College st.
- HARPER, WM. R., Professor
(117 N.) 135 College st.
- HARRIS, SAMUEL, Professor
(1 E.) 144 College st.
- HASKELL, WILLABE, Sup't.
(Reading Room) 96 Dwight st.
- HASTINGS, CHARLES S., Professor
(39 N. S. H.) 191 Bradley st.
- HENESS, GOTTLIEB, Instructor
44 Elm st.
- HONEY, FREDERIC R., Instructor
(53 N. S. H.) 14 Lincoln st.
- HOPPIN, JAMES M., Professor
(3 Art School) 47 Hillhouse av.
- HOTCHKISS, FRANK E., Sup't.
90 High st.
- JOHNSON, SAMUEL W., Professor
54 Trumbull st.
- KEPHART, HORACE S., Assistant
33 Beers st.
- KITCHEL, CORNELIUS L., Instructor
331 Temple st.
- KNAPP, WM. I., Professor
75 Whitney av.
- LADD, GEORGE T., Professor
(276 L.) 324 York st.
- LEE, THOMAS G., Lecturer
113 York st.
- LEIGHTON, ALTON W., Assistant
215 York st.
- LINDSLEY, CHAS. A., Professor
15 Elm st.
- LOOMIS, ELIAS, Professor
141 Church st.
- LOUNSBURY, THOS. R., Professor
22 Lincoln st.
- LYMAN, CHESTER S., Professor
88 Trumbull st.
- MCLAUGHLIN, EDWARD T., Tutor
267 L.
- MARSH, OTHNIEL C., Professor
(8 P.) 360 Prospect st.
- MATHER, THOMAS W., Instructor
19 Warren pl.
- MIXTER, WM. G., Professor
(8 S. H.) 144 Edwards st.
- MOORE, ELIAKIM H., JR., Tutor
70 N. M.
- NEWTON, HUBERT A., Professor
135 Elm st.
- NIEMEYER, JOHN H., Professor
8 Art School
- OSBORN, LEWIS E., Clerk
(5 TR.) 240 Orange st.
- PARK, CHARLES E., Assistant
132 Olive st.
- PECK, TRACY, Professor
124 High st.
- PENFIELD, SAMUEL L., Instructor
(2 P.) 14 S. H.
- PHILLIPS, ANDREW W., Professor
(118 N.) 184 York st.
- PIRSSON, LOUIS V., Assistant
14 S. H.
- PLATT, JOHNSON T., Professor
(95 Orange st.) 256 Bradley st.
- PORTER, NOAH, Professor
(275 L.) 31 Hillhouse av.
- PRICE, WILLIAM, Instructor
104 Wall st.
- RAYNOLDS, EDWARD V., Lecturer
62 Trumbull st.
- REYNOLDS, HORATIO M., Tutor
213 D.
- RICHARDS, CHAS. B., Professor
(45 N. S. H.) 313 York st.
- RICHARDS, EUGENE L., Professor
(86 N. M.) 315 York st.
- RIPLEY, ALFRED L., Ass't. Prof.
240 D.
- ROBINSON, JOHN A., Librarian
(19 Court House) 68 E. Pearl st.
- ROBINSON, WM. C., Professor
(157 Church st.) 137 Edwards st.
- RUSSELL, JOHN E., Professor
(7 E.) 119 Grove st.
- RUSSELL, THOMAS H., Professor
137 Elm st.
- ST. JOHN, SAMUEL B., Lecturer
Hartford
- SANFORD, LEONARD J., Professor
216 Crown st.

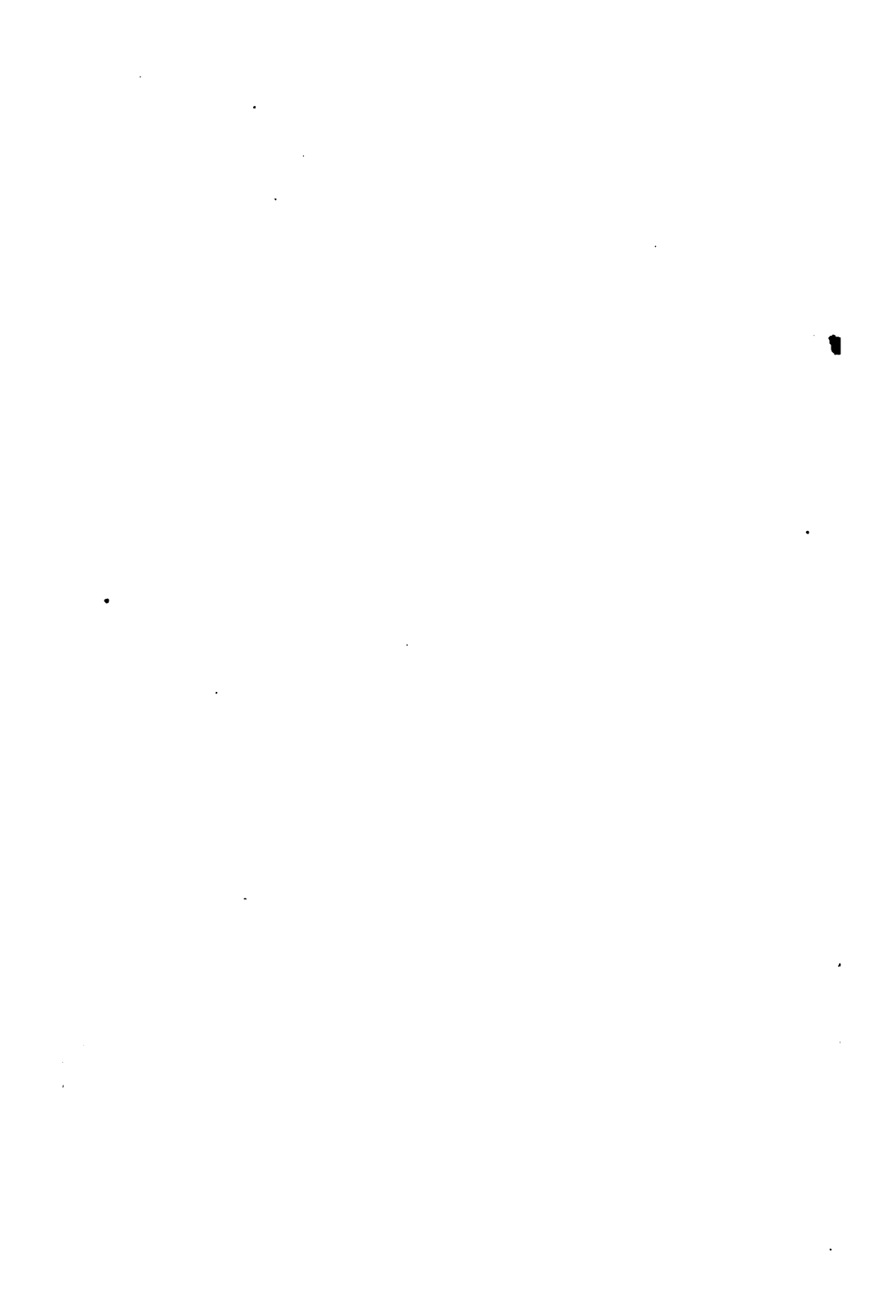
- | | |
|---|---|
| SEAVER, JAY W., Instructor
(1 TR.) 233 York st. | TOWNSEND, WM. K., Professor
(153 Church st.) 148 Grove st. |
| SEYMOUR, MORRIS W., Lecturer
Bridgeport | TRUMBULL, H. CLAY, Lecturer
Philadelphia |
| SEYMOUR, THOMAS D., Professor
(121 N.) 112 College st. | VAN NAME, ADDISON, Librarian
(Library) 121 High st. |
| SIMONDS, WM. E., Lecturer
Hartford | VERRILL, ADDISON E., Professor
(15 P.) 86 Whalley av. |
| SMITH, HERBERT E., Professor
29 Beers st. | WAYLAND, FRANCIS, Professor
(17 Court Ho.) 91 Whitney av. |
| SMITH, J. SUMNER, Librarian
(Library) 78 Trumbull st. | WEIR, JOHN F., Professor
(9 Art School) 58 Trumbull st. |
| SMITH, SIDNEY I., Professor
(14 P.) 147 Whalley av. | WELLS, HORACE L., Instructor
14 S. H. |
| SPERRY, ERWIN S., Assistant S. H. | WHEELER, ALBERT S., Instructor
Tremont House |
| STADTMÜLLER, LOUIS, Clerk
(3 S. H.) 43 Whitney av. | WHEELER, ARTHUR M., Professor
(207 D.) 86 Trumbull st. |
| STEARNS, HENRY P., Lecturer
Hartford | WHEELER, FRANK H., Assistant
188 Crown st. |
| STEVENS, GEORGE B., Professor
(11 E.) 1298 Chapel st. | WHITE, HENRY C., Lecturer
(828 Chapel st.) 82 Wall st. |
| STOECKEL, GUSTAVE J., Instructor
209 York st. | WHITE, MOSES C., Professor
48 College st. |
| STRONG, J. PRESTON, Clerk
(5 TR.) 506 Howard av. | WHITNEY, J. ERNEST, Instructor
(2 TR.) 156 Whitney av. |
| SUMNER, WILLIAM G., Professor
(118 N.) 140 Edwards st. | WHITNEY, WM. D., Professor
227 Church st. |
| SWAIN, HENRY L., Lecturer
159 York st. | WILLISTON, SAM'L W., Ass't. Prof.
113 York st. |
| TAFT, HORACE D., Tutor 102 N. | WOOLSEY, THEODORE S., Professor
250 Church st. |
| THACHER, JAMES K., Professor
206 Crown st. | WRIGHT, ARTHUR W., Professor
(Sloane Lab'y.) 73 York sq. |
| THACHER, THOMAS, Lecturer
N. Y. City | WRIGHT, HENRY P., Professor
(89 N. M.) 128 York st. |
| TOWNSEND, JAMES M., JR., Lecturer
N. Y. City | |

INDEX

	PAGE		PAGE
Abbreviations	4	Charters of the University	15-21
Absence from College, leave of....	30	Civil Engineer. <i>See</i> Engineer.	
bills during	57	College, Beneficiary aid in.....	60-61
Academical Dep't. <i>See</i> College.		Board, price of, in.....	57, 59
Admission, terms of, to Art School.	113	Course of instruction in	30-54
to College	27-30	Degrees in	66, 96-97
to Divinity School.....	115	list of, 1887.....	206-08
to Graduate Courses....	95-97	Elective studies in.....	31-32, 34-45
to Law School.....	149-50	Expenses in	57-59
to Medical School.....	128-29	table of estimated.....	59
to Sheffield Sci. School.	69-72	Faculty of.....	25-26
Advanced Standing, Admission to,		Government of students in...	30
in College.....	29	Graduate Fellowships in.....	62-64
in Sheffield Sci. School.	72	list of holders of.	14
Aid to students in College.....	60-61	Historical notice of	15, 17, 26
in Sheffield Sci. School.	91-92	Honors at graduation in.....	54-55
Appointments, Commencem't, 1887	211-12	awards of, 1887	213
Junior Exhibition, 1887	213-14	Prescribed studies in.....	30-34
Art School, Collections of	114	Prizes offered in.....	64-66, 163
Council of.....	109	awards of, 1886-87.....	214-15
Course of Instruction in	110-13	Rooms in.....	57-59
Faculty of.....	109	prices of	58-59
Fees in.....	113	Scholarships offered in.....	62-64
Library of.....	114	holders of, 1887	214
Students in	191-92	Students in	168-82
Term and vacation in..	113	Terms and vacations in.....	6, 55
Terms of admission to.	113	Terms of admission to	27-30
Arts, Bachelor of, Degree of.....	66	Text-books in	32-45
course for	32-54	cost of.....	59
list of class of 1887	206-07	loan libraries of.....	37, 49, 61
Master of, Degree of.....	96-97	Tuition charges in.....	57
courses for	97-108	Commencement Day	6, 55
list of graduates of 1887	208	Appointments for, 1887	211-12
Astronomical Observatory	161-62	Corporation, Charter powers of....	15-23
Bachelor's Degree. <i>See</i> Arts, Divin-		Legal name of.....	19, 23
ity, Law, Philosophy.		Members and officers of....	5
Beneficiary aid. <i>See</i> Aid.		Courses of Instruction. <i>See</i> Instruc-	
Bills. <i>See</i> Expenses.		tion.	
Board, cost of	57, 59	Degree of Bachelor of Arts.....	66
Bonds of College students.....	29	course for	31-54
of Medical students	137	Bachelor of Civil Law.....	153
Calendar for 1887-88	6	course for.....	147-48
Catalogues, Annual and Triennial	4	Bachelor of Divinity.....	121
Certificates. <i>See</i> Testimonials.		course for	116-21

	PAGE		PAGE
Degree of Bachelor of Laws.....	152-53	Faculty, Law School.....	139
course for.....	140, 142-46	Medical School.....	126
Bachelor of Philosophy.....	92	University.....	7-13
courses for.....	72-90	Fees. <i>See</i> Expenses.	
Civil Engineer.....	97	Fellowships, Graduate, in College.....	62-64
course for.....	74, 83-86, 107-08	in Divinity School.....	124-25
Doctor of Civil Law.....	153	List of holders of.....	14
course for.....	140, 142-43, 150	Fine Arts, School of. <i>See</i> Art.	
Doctor of Medicine.....	135	Government of the University.....	15-23
course for.....	129-35	Graduate Fellowships and Scholar-	
Doctor of Philosophy.....	96	ships. <i>See</i> Fellowships, Scholar-	
courses for.....	97-108	ships.	
Master of Arts.....	96-97	Graduate Instruction, Courses of.....	97-108
courses for.....	97-108	Faculty of.....	93-94
Master of Laws.....	153	Fees in.....	95-97
course for.....	140, 142-43, 150	Historical notice of.....	95
Mechanical Engineer.....	97	Students in.....	164-67
course for.....	74-75, 86-88, 106-07	Terms and Vacations in.....	6, 95
Degrees conferred in 1887, List of.....	206-11	Terms of admission to.....	95-97
Departments of Instruction, List of.....	24	Gymnasium.....	56-57
Directory of Officers.....	218-20	Honorary degrees, List of, 1887.....	210-11
Divinity School, Courses of Instruc-		Honors at graduation, in College.....	54-55
tion in.....	116-21	List of, 1887.....	213
Degree in.....	121	in Law School.....	153
Degrees given in 1887 in.....	209	List of, 1887.....	217
Expenses in.....	123-24	Instruction, Courses of, in Art School.....	110-13
Faculty of.....	115	College.....	30-54
Graduate Fellowships in.....	124-25	Divinity School.....	116-21
list of holders of.....	14	Graduate Courses.....	97-108
Library of.....	122, 155	Law School.....	140, 142-48
Students in.....	193-98	Medical School.....	129-35, 137-38
Term and vacation in.....	125	Sheffield Sci. School.....	68-69, 72-90
Terms of admission to.....	115	Instructors, List of.....	11-13
Doctor's degree. <i>See</i> Law, Medi-		Junior Exhibition, in College.....	65
cine, Philosophy.		Appointments at, 1887.....	213-14
Dwight Hall.....	56	Law School, Courses of instruction	
Elective studies in College.....	31-32, 34-45	in.....	140, 142-46
Engineer, Civil, Degree of.....	97	for special students.....	147-48
course for.....	74, 83-86, 107-08	Degrees in.....	152-53
Mechanical, Degree of.....	97	List of, 1887.....	210
Course for.....	74-75, 86-88, 106-07	Expenses in.....	153
List of graduates of 1887.....	208	Faculty of.....	139
Examinations at Admission. <i>See</i>		Library of.....	141, 151, 155
Admission.		Prizes in.....	152
Expenses, Art School.....	113	awards of, 1887.....	217
College.....	57-59	Students in.....	201-04
Divinity School.....	123-24	Terms and Vacations in.....	148-49
Graduate Courses.....	95-97	Terms of admission to.....	149-51
Law School.....	153	Library, Art School.....	114
Medical School.....	136-37	Divinity School.....	122, 155
Sheffield Scientific School.....	91	Law School.....	141, 151, 155
Faculty, Art School.....	109	Linonian and Brothers.....	154-55
College.....	25-26	Lowell Mason.....	122, 155
Divinity School.....	115	Medical School.....	136
Graduate Courses.....	93-94	Sheffield Scientific School.....	155

	PAGE		PAGE
Library, University.....	56, 154-55	Religious services, College	55
Loan Fund in College.....	60	Divinity School.....	121
Maps. <i>See</i> before title-page.		Required studies in College	30-34
Master's degree. <i>See</i> Arts, Law.		Rooms in College	57-59
Mechanical Engineer's degree. <i>See</i>		Prices of.....	58-59
Engineer.		Scholarships, graduate.....	62-64
Medical School, Course of Instruc-		Holders of.....	14
tion in.....	129-35, 137-38	Undergraduate	64
Degree in	135	Holders of.....	214
list of class of 1887.....	209	<i>See, also</i> , Aid.	
Expenses in	136-37	Secretary, Office hours of.....	4
Faculty of.....	126	Sheffield Scientific School, Board of	
Historical notice of	126-27	State Visitors of.....	68, 92
Library of.....	136	Courses of instruction in	68-69
Prizes in.....	136	graduate	68-69, 97-108
awards of, 1887	216	special	69
Students in	199-200	undergraduate.....	72-90
Terms and vacations in.....	6, 129	Degrees in	92, 96-97
Terms of admission to.....	128-20	list of, 1887	208
Museum of Natural Hist., Peabody	156-60	Expenses in	91
Observatory.....	161-62	Governing Board of.....	67-63
Officers, List of	7-14, 218-20	Historical notice of	68
Optional studies. <i>See</i> Elective.		Library of	155
Peabody Museum of Natural Hist.	156-60	Prizes awarded in, 1887	216
Pecuniary aid in College	60-61	State Scholarships in.....	91-92
in Sheffield Scientific School....	91-92	Students in	183-90
Philosophy, Bachelor of, Degree of	92	Terms and vacations in.....	6, 91
courses for	72-90	Terms of admission to.....	69-72
list of class of 1887.....	208	Students, Lists of.....	164-204
Doctor of, Degree of	96	Summary of	205
courses for	97-108	Studies. <i>See</i> Instruction.	
list of graduates, 1887.....	209	Summary of Students.....	205
Philosophy and the Arts, Depart-		Term-bills. <i>See</i> Expenses.	
ment of.....	24	Terms and Vacations	6
Political and Social Science, grad-		Testimonials on admission to College	29
uate Courses in.....	98-100	Sheffield Scientific School..	69
Porter, John A., University Prize .	163	Text-books used in College.....	32-45
Award of, 1887	214	cost of.....	59
Prayers, College	55	Loan Libraries of.....	37, 49, 61
Preliminary Examinations, College	28	in Sheffield Scientific School..	72-78
Sheffield Scientific School	70-71	Loan Library of.....	90
Premiums. <i>See</i> Prizes.		Theological Department. <i>See</i>	
Prescribed studies in College.....	30-34	Divinity School.	
President, Office hours of.....	4	Treasurer, Bills payable to	57
Prizes, College	64-66, 163	Office hours of.....	4
awards of, 1886-87	214-15	Tuition, charge for, in Art School..	113
Law School	152	College.....	57
awards of, 1887	217	Graduate Courses	95, 97
Medical School	136	Law School.....	153
awards of, 1887	216	Medical School.....	136-37
Sheffield Scientific School,		Sheffield Scientific School..	91
awards of, 1887	216	University, Charters of the	15-21
University	163	Departments of the.....	24
award of, 1887	214	Legal name of the.....	19, 23
Reading Room	56, 155	Vacations	6



1

2

